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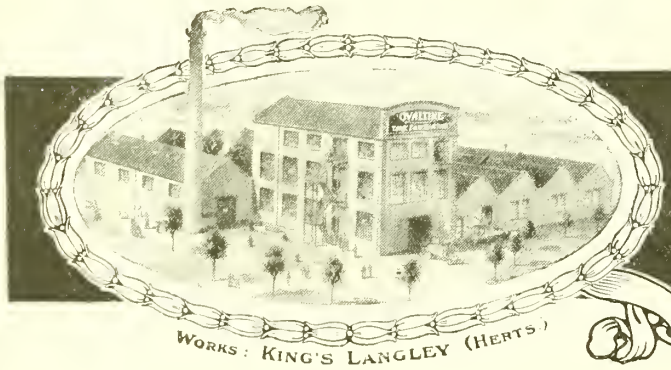

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Ceitol Supply Agency
Cook, E., & Co., Ltd.
Harker, Stagg & Morgan, Ltd.
Eyes' Sanitary Compds Ltd
Morris, Little & Son, Ltd.
Reitmeyer Calburn & Kindersley, Ltd.
Sanitas Co., Ltd.
Stevenson, H. E., & Co.
Willows, Francis, B. & T., Ltd.
Wright, Layman & Umney, Ld.

Druggists' Sundries
Ayrton, Saunders & Co., Ltd.
Balss Bros. & Stevenson, Ltd.
Berton, Arthur, Ltd.
Burge, Warren & Ridgley, Ld.
Burgoyne, Burbidges & Co.
Bush, H. W., & Co., Ltd.
Cuxson, Gerrard & Co., Ltd.
Evans Sons Lescher & Webb, Ld
Hovenden, R., & Sons, Ltd.
Longcroft, H. M.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Reuter, R. J. | Sangers
Schutze, F., & Co., Ltd.
Solport Bros.
Southall Bros. & Barclay, Ltd
Swales, Thomas
Telma Manufacturing Co.
Toogood, W., Ltd.
Woolley, J., Sons & Co., Ltd

Drugs, Crude
Dodge & Olcott Co
Gathergood's Exor.
Goodall, Backhouse & Co.
Lambert, Saml., & Co.
McKesson & Robbins
Potter & Clarke, Ltd.
Raimes & Co.

Eau de Cologne
Bronnley, H., & Co., Ltd.
Bush W. J., & Co., Ltd.
Christy, Thos., & Co.
Erasmic Co., Ltd.
Lescol Perfumery Co.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Sangers
Schutze, F., & Co., Ltd.
Vinolia Co., Ltd.

Eau de Cologne (solid)
Demuth's Laboratories

Educational Institutions
Bath & West of England College
Birmingham & Midland Coll.
British Optical Institute
College of Preceptors
Liverpool School of Pharmacy
London College of Pharmacy
North of England School
Northern College of Pharmacy
South of England College
Westminster College

Elastic Gum Insts.
Mason Bros. & Chapman

Elastic Hosiery
Ayrton, Saunders & Co., Ltd.
Bailey, W. H., & Son
Burge, Warren & Ridgley, Ld.
Haywood, J. H., Ltd.
Maw, S., Son & Sons
Wood, Vincent

Electrical Novelties
Millard Bros., Ltd.
Wright, Archd. J., Ltd.

Emery and Cloth
Oakey, J., & Sons, Ltd.

Emetine Salts
Macfarlan, J. F., & Co.
Whiffen & Sons, Ltd

Emulsifiers
Bennett, Sons & Shears, Ltd
Wilkinson, S. W., & Co.

Emulsions, C.L.O., &c.
Ayrton, Saunders & Co., Ltd.
Balss Bros. & Stevenson, Ltd.
Blackie, Robert
Browning, Wm., & Co.
Cupal, Ltd.
Faulding, F. H., & Co.
Parke, Davis & Co.
Scott & Bowne, Ltd.
Stevenson, H. E., & Co.
Wyleys, Ltd.

Enamelled Hospital Requisites
Orme, Evans & Co., Ltd.

Endolytic Tubes
Fletcher, Fletcher & Co. Ltd

Enemas
Burge, Warren & Ridgley, Ltd.
Ingram, J. G., & Son
Maw, S., Son & Sons
Warne, W., & Co., Ltd

Epsom Salts
Blythe, Wm., & Co., Ltd.
Howards & Sons, Ltd.
May & Baker, Ltd.
Mumford, G. S., & Sons

Essences, Sol. and Fruit
Alliance Drug & Chem.
Barnett & Foster
Boake Roberts & Co., Ltd.
Bush, W. J., & Co., Ltd.
Hay, Wm., Ltd.
London Essence Co.
Polak & Schwarz
Stevenson & Howell, Ltd
Whittaker, Arthur

Ethers
Balss Bros. & Stevenson, Ltd.
Duncan, Flockhart & Co.
Howards & Sons, Ltd.
Macfarlan, J. F., & Co.
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.
White, A., & Sons

Eucalyptus Oil
British Drug Houses, Ltd., The
Stevenson, H. E., & Co.
Tasmanian Encalyptus Oil Co.

Evaporators
Forshaw, E., & Son, Ltd.

Extract of Herbs
Newball & Mason
Potter & Clarke, Ltd.

Extracts (Medicinal)
Allen, Stafford, & Sons, Ltd.
Burroughs Wellcome & Co.
Evans Sons Lescher & Webb, Ld.
Gathergood's Exor.
Hewlett, C. J., & Son, Ltd.
Parke, Davis & Co.
Ransom, W. & Son, Ltd.

Feeding Bottles
Bush, H. W., & Co., Ltd.
Maw, S., Son & Sons
Schutze, F., & Co., Ltd.

Filling Machines
Forgrove Machinery Co., Ltd
Roberts' Pat. Filling Mach Co.

Filters
British Pasteur-Chamberland Filter Co.

Flycatchers
Kay Bros., Ltd.
Smith, Jno. H., & Co.

Foods, Invalid, &c.
Allen & Hanburys, Ltd.
Bell (John), Hills & Lucas, Ltd.
Benger's Food, Ltd.
Brand & Co., Ltd.
British Milk Products Co.
Fairchild Bros. & Foster
Frame Food Co.
Harker, Stagg & Morgan, Ltd
Lorimer, John
Lofthouse & Saltmer, Ltd.
Natural Food Co., Ltd.
Sister Lauras Infant Food Co.
Southall Bros. & Barclay, Ltd
Wander, A., Ltd.
White, A. J., Ltd.
Willows, Francis, B. & T., Ltd.
Woolley, Jas., Sons & Co., Ltd.

Foot Appliances
Scholl Mnfg. Co., Ltd.

Foot Warmers
Swales, Thos.

Formaldehyde
Heymann, Harry

Fruit Drink
McGlashan, D.

Fuller's Earth
Mumford, G. S., & Sons

Fumigators
Sanitas Co., Ltd.

Gallic Acid
Mallinckrodt Chem. Works

Gauzes
Bailey, R., & Son
Carnegie Bros.
Taylor, W. G.

Gelatines
Crampton, J., & Co., Ltd.

Glassware, Chemical
De Roubaix & Cassiers
Lang, Jules, & Son
Thompson, J. L., & Co.

Glycerin
Price's Patent Candle Co., Ltd.

Glycerophosphates
Monsanto Chemical Works
Reitmeyer Calburn & Kindersley, Ltd.

Gold Beaters' Skin
Gates, Leslie

Grease Paints
Hovenden, R. & Sons Ltd.
Quelch, Henry C., & Co.

Grinders, Drug, &c.
Allen, Stafford, & Sons, Ltd.
Goodall, Backhouse & Co.
Willows, Francis, B. & T., Ltd.

Gripe Water
Woodward, W., Ltd.

Gums
Fink, F., & Co.
Kidston, W. M., & Co.
Lambert, Saml., & Co.

Hair Dyes
Harker, C.R., Stagg & Morgan
Blackie, Robert

Hair Preparations
Alexandre, L.
Anzora Perfumery Co.
Blackie, Robert
Edwards' "Harlene" Co.
Franklin Co.
Kolene Co.
Ni-Verre Chemical Co.
Sangers

Hand Carts, Trucks, &c.
Crewe & Co.

Hat Cleaners
Cox, Arthur H., & Co., Ltd.
Milner's Chemical Co.

Hat Dyes
Whitaker & Co.

Heating Apparatus
Little Kitchener Co.
Tommy's Cooker Co., Ltd.

Herbs
Brook, Parker & Co., Ltd.
Potter & Clarke, Ltd.

Homœopathic Medicines
Ashton & Parsons, Ltd.
Keene & Ashwell, Ltd.

Horse Remedies
Harvey & Co. (Dublin), Ltd.

Hot Water Bottles
Bailey, W. H., & Son
Berton, Arthur, Ltd.
Burge, Warren & Ridgley, Ltd.
Galen Manfg. Co., Ltd.
Ingram, J. G., & Son
Maw, S., Son & Sons
Toogood, William, Ltd.
Warne, Wm., & Co., Ltd.
Wood, Vincent

Hot Water Bottle Stoppers
Rowe, T. Wilfrid

Hotels
Kingsley Hotel
Thackeray Hotel

Hydrogen Peroxide
Laporte, B., Ltd.
May & Baker, Ltd.
Sanitas Co., Ltd.
Tyrer, T., & Co. Ltd.

Hypophosphites
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

Ink, Dichroic
Bewley & Draper, Ltd.

Insecticides
Christy, T., & Co.
Cook, E., & Co., Ltd.

Insect Powder
Potter & Clarke, Ltd.
Raimes & Co.

Iodides
Tyrer, T., & Co., Ltd.
Whiffen & Sons, Ltd.

Ionone
English Drug & Chemical Works, Ltd.

Lanolines
Bonaventura, F., & Co.
Corbyn, Stacey & Co., Ltd.
Hillcrest Oil Co., Ltd.
Howard Lloyd & Co., Ltd.

Lard
Ewen, J., & Sons

Lavender Oil
Allen, Stafford, & Sons, Ltd.
Guillevic, E., & Co.
Ransom, W., & Son, Ltd.

Lavender Water
Bush, W. J., & Co., Ltd.
Sangers
Vinolia Co., Ltd.

Lime Juice and Cordial
Evans Sons Lescher & Webb, Ld
Idris & Co., Ltd.

Linseed, Crushed
Mumford, G. S., & Sons

Lints
Liverpool Lint Co.
Maw, S., Son & Sons
Robinson & Sons, Ltd.
Taylor, W. G.
Vernon & Co., Ltd.

Liquorice Juice
Boehm, F., Ltd.
Fuerst Bros.
Jackson, Ernest, & Co.
Mumford, G. S., & Sons
Solazzi

Liquors, Conc.
Fletcher, Fletcher & Co.

Lithia Salts
British Drug Houses, Ld., The
Howards & Sons, Ltd.
Macfarlan, J. F., & Co.
May & Baker, Ltd.

Loofah Socks
Davis, J. M., & Sons

Loofahs
Hall Forster & Co., Ltd
Internl. Sponge Importers, Ld
Solport Bros., Ltd.

Lozenges
Cox, Arthur H., & Co., Ltd.
Crosse & Blackwell
Denoual, Jules, & Co.
Gnest, Thos., & Co.
Jackson, Ernest, & Co.
Parke, Davis & Co.
Potter & Clarke, Ltd.
Raimes & Co.
Warrick Bros., Ltd.

Lycopodium
White Sea & Baltic Co.

Lysols
Burt, Boulton & Haywood, Ld
English Drug & Chemical Works, Ltd.
Encryl Ltd.
Evans Sons Lescher & Webb, Ld
Lysol, Ltd.

Machinery, Pharmacal
Allen & Hanburys, Ltd.
Bennett, Sons & Shears, Ltd.
Blair, Campbell & McLean, Ld.
Forgrove Machinery Co., Ltd.
Gardner, Wm., & Sons, Ltd.
Griffin, John J., & Sons, Ltd.
Pindar, J. W., & Co.
Stokes, F. J., Machine Co.
Thompson & Capper, Ltd.
Wilkinson, S. W., & Co.

Magnesia and Preps.
Henry, T. & W.
Howards & Sons, Ltd.
Phillips, Chas. H., Chem. Co.
Washington Chemical Co., Ld.

Malt Extract and Preps.
Allen & Hanburys, Ltd.
Blackie, Robert
British Drug Houses, Ld., The
Burroughs Wellcome & Co.
Calder, James, & Co., Ltd.
Calder's Yeast Co., Ltd.
Corbyn, Stacey & Co., Ltd.
Davies, Sons & Co.
Evans Sons Lescher & Webb, Ld
Fletcher, Fletcher & Co., Ltd.
May, Roberts & Co., Ltd.
Oppenheimer, Son & Co., Ltd.
Paine & Co., Ltd.
Pascall, James, Ltd.
Tolkein, C., & Co.
Wander, A., Ltd.
Wyleys, Ltd.

Marking Ink
John Bond ('Crystal Palace')

Measures, Graduated
Bush, H. W., & Co., Ltd.

Meat Extracts
Armour & Co., Ltd.
Brand & Co., Ltd.

Mercurials
Alliance Drug & Chemical Co.
Howards & Sons, Ltd.
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

Methylated Spirit
Burrough, J., Ltd.
Preston's Liverpool Distillery
Randall & Son, Ltd. [Co., Ld.
Thornley, Samuel, Ltd.

Mineral Waters
Camwal, Ltd.
Cheltenham Mineral Water
Idris & Co., Ltd.
Ingram & Royle, Ltd.
Vichy-Celestins

Mixers and Sifters
Gardner, Wm. & Sons (Glos.) Ld
Stokes, F. J., Machine Co.

Naphthalene
Burt, Boulton & Haywood, Ld.

Nebulizers
Reuter R. J.

Night Lights
Price's Patent Candle Co., Ld.

Oils, Essential
Allen, Stafford, & Sons, Ltd.
Alliance Drug & Chemical Co.
Boake Roberts & Co., Ltd.
Boehm, F., Ltd.
Bush, W. J., & Co., Ltd.
Dodge & Olcott Co.
Evans Sons Lescher & Webb, Ld
Guillevic, E., & Co.
Lambert, Saml., & Co.
Lane-Hall, R., & Co.
London Essence Co.
Magnus, Mabee & Reynard Inc.
Naef, M., & Co.
Polak & Schwarz
Ransom, W., & Son, Ltd.
Stevenson & Howell, Ltd.
Welch & Horner
Wiener, R. O., & Co.
Wright, Layman & Umney, Ld.
Zimmermann, C., & Co., Ltd.

Oils, Mineral, Fatty, &c.
Allen, Stafford, & Sons Ltd.
Boehm, F., Ltd.
Price's Patent Candle Co. Ld.
Stern Sonneborn Oil Co., Ltd.

Ointments
Blackie Robert
Burgess, E.
Charleston & Co.
Menthol Inhalum Co.
Oldfield, Pattinson & Co.
Peat Products (Sphagnol) Ltd.

Olive Oil
Farris, Charles
Fuerst Bros.
Guillevic, E., & Co.

Opium Preparations
Ferris & Co., Ltd.
Oldfield, Pattinson & Co.

Optical Goods
Darton, F., & Co.
Maw, S., Son & Sons
Nitsche & Gunther Optical Co., Ltd.
Standard Optical Co., Ltd.

Optical Tuition
British Optical Institute
College of Optics

Orange and Quinine Wine
Idris & Co., Ltd.
Millar, A., & Co., Ltd.
Robinson, B., & Co., Ltd.

Organic Solvents
Hopkin & Williams, Ltd.

Organo-Therapeutic Preps.
Armour & Co., Ltd.
British Organotherapy Co., Ld
Digestive Ferments Co.
Duncan, Flockhart & Co.
Stearns, Fredk., & Co.

Otto Rose
Guillevic, E., & Co.
Zimmermann, C., & Co., Ltd.

Otto Rose (Synth.)
Bush, W. J., & Co., Ltd.
Guillevic, E., & Co.
Kerfoot, Thos., & Co.
Polak & Schwarz
Stevenson & Howell, Ltd
Stevenson, H. E., & Co.
Warrick Bros., Ltd.
Wright, Layman & Umney, Ld.

Oxygen Baths
Wright & Co.

Oxygen Gas (in Cylinders)
Lea & Son

Palatinoids
Oppenheimer, Son & Co., Ltd.

Paper Handkerchiefs
Toinoco Handkerchief Co., Ld

Paraffinum Liquidum
Browning, Wm. & Co
Chesebrough Mnfg. Co.
Farris, Charles
Fuerst Bros.
Produce Brokers Co. Ltd.
Snowdon, Sons & Co., Ltd.
Stern Sonneborn Oil Co. Ltd.
Wiener, R. O., & Co.

Pastilles
Allen & Hanburys, Ltd.
Burroughs Wellcome & Co.
Demuth's Laboratories
Evans Sons, Lescher & Webb
Gnest, Thos., & Co.
Kerfoot, Thomas, & Co.
Wander, A., Ltd.
Warrick Bros., Ltd.

Patent Agents
Barker, R. W.
Raworth, John E.

Peppermint Oil
Allen, Stafford, & Sons Ltd.
Bush, W. J., & Co., Ltd.
Dodge & Olcott Co.
Ransom, W., & Son, Ltd.
Rudd, F. M.
Stevenson & Howell, Ltd.

Pepsine
Digestive Ferments Co.
Greeff, R. W., & Co.
Stearns, Fredk., & Co.

Peptone
Armour & Co., Ltd.
Digestive Ferments Co.
Fairchild Bros. & Foster
Stearns, Fredk., & Co.

Perfume Materials
Bush, W. J., & Co., Ltd.
Guillevic, E., & Co.
Kerfoot, T., & Co.
Lane-Hall, R., & Co.
Naef, M., & Co., Succrs.
Polak & Schwarz
Stevenson & Howell, Ltd.
Wright, Layman & Umney, Ld.
Zimmermann, C., & Co. Ltd.

Perfumes
Allen & Hanburys, Ltd.
Balss Bros. & Stevenson, Ltd.
British Drug Houses, Ld., The
Bronnley, H., & Co., Ltd.
Bush, W. J., & Co., Ltd.
Christy, T., & Co.
Demuth's Laboratories
Erasmic Co., Ltd.
Evans Sons Lescher & Webb, Ld
Lescol Perfumery Co.
Potter & Clarke, Ltd
Price's Co., Ltd.
Quelch, H. C., & Co.
Rigaud
Shirley Bros., Ltd.
Southall Bros. & Barclay, Ld.
Vinolia Co., Ltd.
Warrick Bros., Ltd.
West, T., & Son

Perles
Tye, John, & Son

Pessaries (Soluble)
Burge, Warren & Ridgley, Ld.
Rendell, W. J.

Petroleum Jelly
Chesebrough Manfg. Co.
Kidston, W. M., & Co.
Meade-King, Robinson & Co.
Stern Sonneborn Oil Co., Ltd.
Wiener, R. O., & Co.

Phenacetin
Greeff, R. W., & Co.
Monsanto Chemical Works

Phenolphthalein
Phenol & Allied Products, Ld.

Phosphorus and Preps.
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

Photo. Chemicals
Greeff, R. W., & Co.
Lane-Hall, R., & Co.
Reitmeyer, Calburn & Kindersley, Ltd.

Photo. Goods
Ayrton, Saunders & Co., Ltd.
Burroughs Wellcome & Co.
Butcher, W., & Sons, Ltd.
Evans Sons Lescher & Webb, Ld
Kent, G. B., & Sons, Ltd.
Lemon, Ltd.
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Rajar, Ltd.
Sangers
Wyleys, Ltd.

Photo. Postcards
Rajar, Ltd.

Pile Powders
Mumford, G. S., & Sons

Pill makers
Cox, A. H., & Co., Ltd.
Davies, Sons & Co.
Howard Lloyd & Co., Ltd.
Kirby, H. & T., & Co., Ltd.
McKesson & Robbins
Standard Tablet & Pill Co., Ld.
Wand Manufacturing Co.

Plasters
Allcock Manufacturing Co.
Dalmas, A. de St., & Co.
Galen Manufctg. Co., Ltd

Pocket Spitting Flasks
Beatson, Clark & Co., Ltd.

Polishes (Various)
Bradley & Bourdas
Oakey, J., & Sons, Ltd.

Postal Boxes
Globe Box Co.
Robinson & Sons Ltd.

Powder Paper
Papier Poudré Ltd.

Printers
Cartwright & Rattray, Ltd.
Ford, Shapland & Co.
Suttley & Silverlock, Ltd.
Towsend, J., & Sons
Waide, T., & Sons
Wilkinson, James F.

Puffs
Schutze, F., & Co., Ltd.
Solport Bros.

Pyrogallic Acid
Greeff, R. W., & Co.

Quinine and Salts
Alliance Drug & Chem. Co.
Bandoeng Quinine Factory
Corbyn, Stacey & Co., Ltd.
Greeff, R. W., & Co.
Howards & Sons, Ltd

Radio-active Minerals
Harrington Bros., Ltd.

Radium Compounds
Glew, F. H.

Razors
Hovenden, R., & Sons, Ltd.
Kelland, W. P.
Maw, S., Son & Sons

Reagents
Hopkin & Williams, Ltd.

Resins, Resinoids
Allen, Stafford, & Sons, Ltd.
Macfarlan, J. F., & Co.
Ransom, W., & Son, Ltd.
Smith, T. & H., Ltd.

Respirators
Brown, J. M., & Co.
Solport Bros., Ltd.

Rubber Goods
Altrincham Rubber Co.
Berton, Arthur, Ltd.
Burge, Warren & Ridgley, Ltd.
Davol Rubber Co.
Haywood, J. H., Ltd.
Ingram, J. G., & Son
Maw, S., Son & Sons
Tompkins, J., Ltd.
Warne, W., & Co., Ltd.

Rubber Stamps
Richford, C. D.

Saccharin
Saccharin Corporation, Ltd.

Salicylic Acid and Salicylates
Bush, W. J., & Co., Ltd.
Central Export Bureau
Fuerst Bros.
London Chemical Works, Ltd.

Salvarsan, &c., Substitutes
Bresillon, M., & Co.

Sanitary Towels
Southall Bros. & Barclay, Ltd.

Santonine
Carnegie Bros.
Goldberg, I. L.

Saponin
Field, C. W., Ltd.

Scientific Apparatus
Porken, Son & Co., Ltd.
Pillischer, J.
Reynolds & Branson Ltd.

Sea Salt
Tidman & Son, Ltd.

Seed Dressing
Hawker, Arthur E.
Tomlinson & Hayward, Ltd.

Serums and Antitoxins
Allen & Hanburys, Ltd.
Burroughs Wellcome & Co., Ld.
Christy, T., & Co.
Evans Sons Lescher & Webb, Ld
Parke, Davis & Co.
Willcox, Joseau & Co.

Shares
McAdam & Tucknies

Sheep Dips
Burt, Boulton & Haywood Ld.
Morris, Little & Son, Ltd.
Tomlinson & Hayward, Ltd.

Shop Fittings
Ayrton-Graham, Ltd.
Cook, George
Evans Sons Lescher & Webb, Ld.
Grant, D.
Haskins, S., & Bros., Ltd.
Josephs, Philip, & Sons, Ltd.
Maw, S., Son & Sons
Mills, H.
Parnall & Sons
Ruddock & Co.
Sangers

Shoulder Straps
Wood, Vincent

Silver Salts
English Drug & Chemical Works, Ltd
Johnson, Matthey & Co., Ltd.

Soap Plant
Forshaw, E., & Son, Ltd.

Soaps, Medicated
Midgley, Chas., Ltd.

Soaps, Toilet, &c.
Allen & Hanburys, Ltd.
Bell (John), Hills & Lucas, Ld.
Bronnley, H., & Co., Ltd.
Chesebrough Manfg. Co.
Christy, Thos., & Co.
Cook, E., & Co., Ltd.
Erasmic Co., Ltd.
Eucryl, Ltd.
Evans Sons Lescher & Webb, Ld
Ewen, James, & Sons
Faulding, F. H., & Co.
Field, J. C. & J., Ltd.
Hovenden, R., & Sons, Ltd.
Lescol Perfumery Co.
Pears, A. & F., Ltd.
Peat Products (Sphagnol) Ltd.
Price's Patent Candle Co., Ld.
Resinol Chemical Co.
Vinolia Co., Ltd.
Wright, Layman & Umney, Ld

Sodium Bicarbonate
Brunner, Mond & Co., Ltd.
Howards & Sons, Ltd.

Sodium Hyposulphite
Nicholson, J., & Sons, Ltd.

Soothers
Schutze, F., & Co., Ltd.

Spectacles
Darton, F., & Co.
Maw, S., Son & Sons
Nitsche & Gunther Optical Co., Ltd.

Spermaceti
Farris, Charles
Price's Patent Candle Co., Ld.

Spices (Ground)
Allen, Stafford, & Sons, Ltd.
Goodall, Backhouse & Co.

Spirit of Wine
Burrough, J., Ltd.
Calder, James, & Co., Ltd.
Preston's Liverpool Distillery Co., Ltd.

Sponges
Internl. Sponge Importers, Ld

Sprays
Burge, Warren & Ridgley, Ltd.
Christy, Thos., & Co.
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
Parke, Davis & Co.
Sangers
Toogood, Wm., Ltd.

Sprinkler Corks
Betts & Co., Ltd.

Starch
Mumford, G. S., & Sons

Stills
Bennett, Sons & Shears, Ltd.
Forshaw, E., & Son, Ltd.
Stokes, F. J., Machine Co.

Stoppers
Rowe, T. Wilfrid
Stipendum Stopper Co.

Sulphur
Reitmeyer Calburn & Kindersley, Ltd.

Suppositories
Peat Products (Sphagnol), Ltd.

Surgical Appliances & Dressings
Allen & Hanburys, Ltd.
Bailey, R., & Son
Baiss Bros. & Stevenson, Ltd
Berton, Arthur, Ltd.
Burgoyne, Burbidges & Co.
Burroughs Wellcome & Co.
Bush, Henry W., & Co., Ltd.
Carnegie Bros.
Christy, Thos., & Co.
Cuxson, Gerrard & Co., Ltd.
Dalmas, A. de St., & Co.
Galen Manfg. Co., Ltd.
Gimber, W., & Son
Haynes, G., & Co.
Hospitals & General Contracts Co., Ltd.
Liverpool Lint Co.
Macfarlan, J. F., & Co.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Mulford, H. K., Co
Robinson & Sons, Ltd.
Taylor, W. G.
Thermogene Co., Ltd.
Van Horn & Sawtell
Vernon & Co., Ltd.
Vernon, Will, & Sons
Warne, W., & Co., Ltd.
Wood, Vincent
Woolley, J., Sons & Co., Ltd.

Suspensories
Bailey, W. H., & Sons

Synthetic Prods.
Naef, M., & Co.
Stevenson & Howell, Ltd

Syphons
Barnett & Foster
Camwal, Ltd.
Idris & Co., Ltd.

Syringes
Bresillon, M., & Co.
Bush, H. W., & Co., Ltd.
Lang, Jules, & Co.

Syrups, Medicinal
Anglo-American Pharmaceutical Co., Ltd.
Fellows' Med. Mnfg. Co.

Table Waters
Burrow, W. & J.

Tablet Machinery
Allen & Hanburys, Ltd.
Bennett, Sons & Shears, Ltd
Griffin, John J., & Sons, Ltd.
Thompson & Capper, Ltd.
Wilkinson, S. W., & Co.

Tablets, Compressed
Allen & Hanburys, Ltd.
British Drug Houses, Ld., The
Brook, Parker & Co., Ltd.
Burgoyne, Burbidges & Co.
Cox, A. H., & Co., Ltd.
Davies, Sons & Co.
Duncan, Flockhart & Co.
Evans Sons Lescher & Webb, Ld
Guest, Thos., & Co.
Howards & Sons, Ltd.
Jackson, Ernest, & Co.
Kirby, H. & T., & Co., Ltd.
Parke, Davis & Co.
Scheller, Emil, & Co.
Shirley Bros., Ltd.
Southall Bros & Barclay, Ltd.
Standard Tablet & Pill Co., Ld.
Thompson & Capper, Ltd.
Wand Manfg. Co.
Wigglesworth & Co.

"Tabloid" Products
Burroughs Wellcome & Co.

Talc, Powdered
Levermore, Aug., & Co.

Tea
Christy, Thos., & Co.

Tea Tablets
Ayrton, Saunders & Co., Ltd.

Teats
Ingram, J. G., & Son

Terpeneless Oils
Naef, M., & Co.
Polak & Schwarz
Zimmermann, C., & Co., Ltd.

Theobromine
Scheller, Emil, & Co.
Smith, T. & H., Ltd.
Societeit voor Chemische Industrie Katwijk

Thymol
Verona Chemical Co.

Tin Box Makers
Goodall, Backhouse & Co.
Liverpool Tin Canister Co., Ltd.

Tinctures in Bond
Allen, Stafford, & Sons, Ltd.
Macfarlan, J. F., & Co.
Ransom, W., & Son, Ltd.

Tinfoil
Venesta Ltd.

Tobacco
Singleton & Cole, Ltd.

Toilet Preparations
Christy, T., & Co.
Cuxson, Gerrard & Co.
Fulford, C. E., Ltd.
Goodall, Backhouse & Co.
Hall Forster & Co., Ltd.
Knox-Walker, J., & Co., Ltd.
Levers
Lloyd, Aimeé, & Co.
Papier Poudré, Ltd.
Quelch, H. C., & Co.
Rosmarine Mnfg. Co.
Stevenson & Howell, Ltd.
Vinolia Co., Ltd.

Toilet Paper
Ayrton, Saunders & Co., Ltd.
Burgoyne, Burbidges & Co.
Ford, Shapland & Co.
Townsend, J., & Sons

Trade-Marks Agents
Barker, R. W.
Ford, Shapland & Co.
Raworth, John E.

Trade Protection
Assoc. of Mnfg. Chemists, Ld.

Translations
Mascarenhas, Dr.

Trusses
Bailey, W. H. & Son
Bush, H. W., & Co., Ltd.
Davis, J. M., & Sons, Ltd.
Haywood, J. H., Ltd.
Maw, S., Son & Sons
Sangers
Schutze, F., & Co., Ltd.
Wood, Vincent
Woolley, J., Sons & Co., Ltd.

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Estes, E. B., & Sons
Wright, Arch. J., Ltd.

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Lambert, Saml., & Co.

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Boyton, Chas., & Son
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Valuers
Baker, P. C.
Berdoe & Fish
Brett & Co.
Orridge & Co.
Tomlinson, T., & Son

Vanilla Beans
Magnus, Mabee & Reynard Ins.

Vanillin
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Greeff, R. W., & Co.
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Danysz Virus, Ltd.
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Farmer, F., & Co.
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Milner's Chemical Co.
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Vet. Remedies
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Wyleys, Ltd.

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Brown & Sons
Stokes, F. J., Machine & Co

Waters, Concentrated
Robinson, B., & Co., Ltd.

Waxes
Asiatic Petroleum Co.
Boenm F., Ltd.
Farris, Charles
Price's Pat. Candle Co.
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Weed Killers
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White Oils
Farris, Charles
Snowdon, Sons & Co., Ltd.

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Burroughs Wellcome & Co.
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Fletcher, Fletcher & Co., Ltd.
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Idris & Co., Ltd.
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Zinc Oxide
Hubbuck, T., & Son Ltd.
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SAVE 3/- PER GALLON
BY BUYING
GUARANTEED GENUINE
NEWFOUNDLAND NON-FREEZING
MEDICINAL COD LIVER OIL
OF 1915 MAKE.

Highest possible quality in smell, taste and colour, comparing most favourably with the finest Norwegian. Manufactured from the finest fresh Cod Liver on same day as fish caught.

WHOLESALE ONLY.

Kindly write for sample to

JOB BROS., Manufacturers, Tower Building, LIVERPOOL.

Telegraphic Address: "JOB LIVERPOOL." Tel. 1039 CENTRAL.

And of ST. JOHN'S, N.F. Established 1780.

Let the time-saving 'DREADNOUGHT'

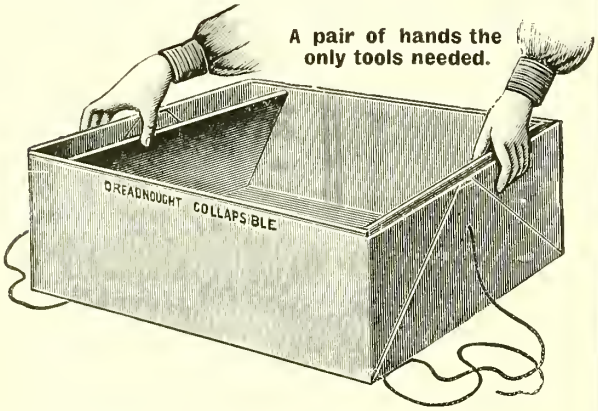
Patent

Collapsible Box

carry your goods in

1916

Here it is, in course of erection!



All the essentials of the ideal packing case: Lightness, strength, rigidity, easy attachability, collapsibility, and good appearance are combined in the 'Dreadnought.'

Now being adopted by many of the foremost firms in the trade for the transit of all classes of goods.

An inquiry, stating sizes of boxes, weight and nature of contents and quantities required, addressed to the Makers,

GLOBE BOX CO.,
HYDE .·. .·. CHESHIRE

(Proprietors: Cartwright & Rattray, Ltd.)

will secure you full particulars, prices and terms.

Telephone No. 115 Hyde (2 lines).

CARTONS FOR STOCK LINES

WE HAVE A LARGE VARIETY OF CARTONS IN STOCK, ONE OF WHICH WE ILLUSTRATE ABOVE. THE WORKMANSHIP IS GOOD THROUGHOUT, AND WE CAN RECOMMEND THEM TO ALL WHO WISH TO SEE THEIR GOODS WELL PACKED.

WE SHALL BE GLAD TO SEND SAMPLES OF ANY OF THE FOLLOWING CARTONS FOR

BLOOD MIXTURE
CAMOMILE
COUGH BALSAM
EMBROCATION
FRUIT SALINE
HAIR RESTORER
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ROBINSON & SONS, LTD.

BOX MAKERS TO THE CHEMIST TRADE

CHESTERFIELD & LONDON.

(21)

PHARMACEUTICAL AND PHOTOGRAPHIC PRODUCTS

R.W. Greeff & Co.,

offer at lowest prices the following products manufactured in the United Kingdom, Allied and Neutral Countries.

(WHOLESALE QUANTITIES ONLY)

Barbitone
Bromide of Ammonium
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Bromide of Sodium
Chloral Hydrate
Cinchonine Sulphate and Muriate
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Citric Acid
Cocain Hydrochlor and Puriss
Cream of Tartar
Creosote Carbonate
Formaldehyde
Gallic Acid
Glycerophosphates
Guaiacol Carbonate
Heliotropin
Hexamine
Homatropine
Hydroquinone
Isaroi (best Ichthyol substitute)
Lithia Carbonate
Lithol (Ichthyol sub.)
Mercurials
Methyl Salicylate
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Pepsine
Phenacetin
Phenazone
Pyrogallic Acid
Potassium Sulpho-Guaiacolate
Quinine
Salicylate of Soda
Sugar of Milk
Tannic Acid
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Terpineol
Theobromine
Vanillin

R.W. Greeff & Co.,
THAMES HOUSE, QUEEN STREET PLACE,
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This map shows the easy accessibility of Farris's from all parts of London.

The only actual Manufacturing Wax Chandler in the City of London.

"FARRIS'S"

GENUINE WHITE BEESWAX.

GUARANTEED PURE AND AIR BLEACHED.

IN 1-oz. FLAT ROUNDS OR BLOCKS.

WAXES of every known kind and for every purpose.

Celebrated for excellence and purity—nearly three quarters of a century.

SAMPLES AND PRICES SUBMITTED FOR COMPARISON.

CHARLES FARRIS, 71 BISHOPSGATE, LONDON, E.C.

***Works*—HELMET COURT, BISHOPSGATE, E.C.**

Warehouses & Stores—91 & 93 BISHOPSGATE, and 12 WORMWOOD ST., E.C.

Telephones: LONDON WALL, 9397 and 9398. Telegrams: "WAXINESS (LED) LONDON."

TELEGRAPHIC ADDRESS: ELEVEN CENT LONDON

Maw's Page

S. MAW, SON & SONS
7 to 12, ALDERSGATE ST.
LONDON, E.C.

TELEPHONE CITY 7
PRIVATE BRANCH EXCHANGE

NUMBER 221 JANUARY 8, 1916

"The perfect Enema in the perfect box."

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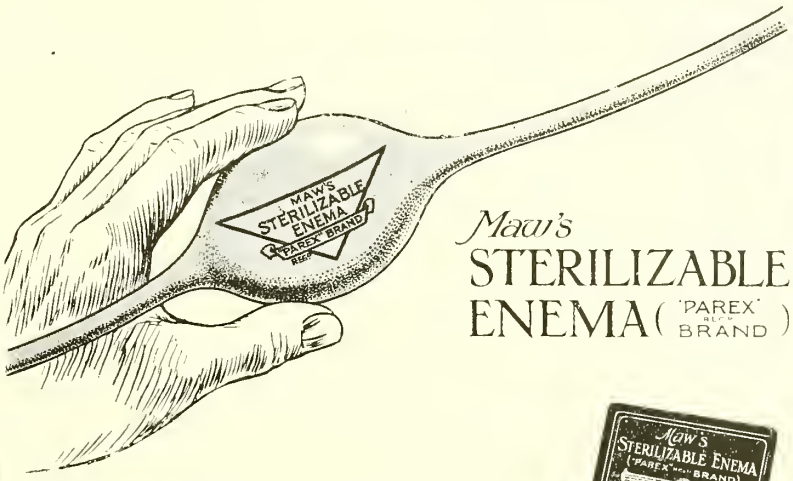
Price 36/- Dozen.

Usual Discount.



Maw's
STERILIZABLE ENEMA ('PAREX' REGD. BRAND)

No enema, at the price, is *quite* so good as this pattern, because Maw's 'Parex' Sterilizable Enema is constructed upon the latest principles by improved methods. There is quality, too, in every section of this requisite. Materials play an important part in the making of 'Parex' perfection!

Maw's Sterilizable Enema ('Parex' regd. brand) is made of red rubber, and fitted with stout glass rectal and vaginal pipes. Put up in handsome enamelled tin case, with clips at base to hold fittings.

The contents can be entirely sterilized.

Splendid showcard with orders.

Every Little Helps

Individual effort, when pitted against the combined actions of millions, is infinitesimal. Yet, in the upheaval of Europe we have learned that the work of many, when viewed collectively, results in great achievements. It is the old story of the drops of water making the ocean. At the present time, whether in the field or in business, we are all determined to assist in every way possible. We mean to keep the cogs of war and commerce well oiled. We all intend to help.

. . . .

Here is just such an opportunity to make things easier for all concerned. It is best explained by a reproduction of a letter sent to us by the Controller of the General Post Office.

. . . .

"Gentlemen,—Many of the letters intended for delivery to your representatives when they call at the General Post Office are still addressed in the same way as letters delivered by postmen, and there is sometimes difficulty in separating the two kinds of letters without loss of time, especially now that the Post Office is employing so many temporary men in place of regular men who have enlisted. It will facilitate the delivery of letters to be called for if you can arrange to include your Box number in your address as shown below:

"Messrs. S. Maw, Son & Sons,
G.P.O., Box No. 54,
7/12 Aldersgate Street,
London, E.C."

. . . .

"And if," concludes the letter, "you see no objection, perhaps you will adopt this form of address and request your correspondents to always include your Box number when addressing letters to you."

Capsule

REVISION OF PRICES. **JANUARY 1916.**

COCKLE'S PILLS.

Consequent upon additional Inland Revenue Duty imposed under Budget 1916, prices are as from this date revised as shown below.

A large portion of this increased Duty is borne by ourselves in order to ensure a satisfactory rate of profit to the Trade and uniform selling prices to the public, viz., 1/-, 2/6 and 4/6 for the popular sizes.

Strict maintenance of the following prices and conditions by all sections of the trade, and the active co-operation of Pharmacists is confidently invited.

JAMES COCKLE & CO.

PRICES IN FORCE, JANUARY 1, 1916. Great Britain.

Size.	1 doz. and over.	Under 1 doz.	Minimum selling price.
1/-	9/9	10/-	1/-
2/6	24/3	25/-	2/6
4/6	39/6	41/-	4/6
10/6	—	100/-	10/6
21/-	—	200/-	21/-

OBTAINABLE THROUGH ALL WHOLESALERS.

JAMES COCKLE & CO., 4 Great Ormond Street, LONDON, W.C.

Depot for Ireland— MAY, ROBERTS & CO., Ltd., Westmoreland Street, DUBLIN.

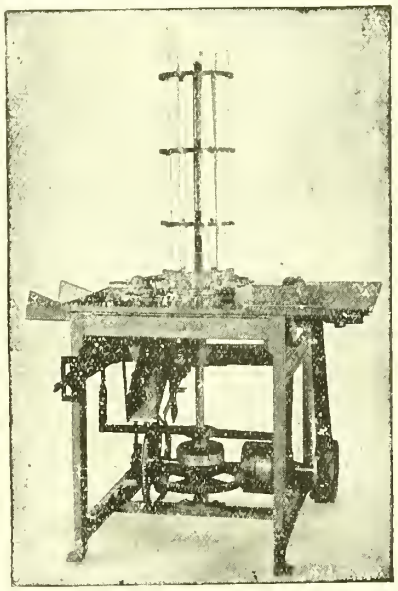
Depot for Australasia— FASSETT & JOHNSON, Ltd., 5/7 Barrack Street, SYDNEY, N.S.W.

SURGICAL BANDAGE MACHINERY

Complete Plant for Making Bandages.

CLOTH ROLLING & MEASURING MACHINE
BANDAGE PAPERING MACHINE.
BANDAGE CUTTING MACHINE.

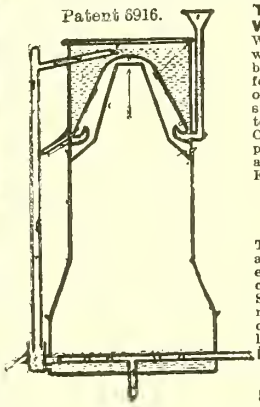
BANDAGE CUTTING MACHINE



CUTS — 66 — BANDAGES PER MINUTE

Prices and Particulars on application to Patentees & Manufacturers
THOMSON-KNOX COMPANY 8-12 Maxwell Street, GLASGOW.

Patent 6916.



TO MANUFACTURING AND WHOLESALE DRUGGISTS, &c.

We beg to call attention to the fact that our well-known Patent Stills are made for heating by steam pressure. Where this is available it forms a very cheap and efficient method of obtaining distilled water. Any pressure will suit from 10 to 200 lb., made in various sizes to produce from 1½ to 15 gallons PER HOUR. Cost of distilled water made this way is practically nil. As with our Gas Stills, these are perfectly automatic. Prices as below :—

For producing up to

1½ gallons per hour,			£3 10 0
,, 5	,,	,,	£10 0 0
,, 9	,,	,,	£12 10 0
,, 15	,,	,,	£16 10 0

The few most important places we give below afford evidence of the quality, efficiency and economy of the Steam Stills:—National Physical Laboratory, 2 in use; Imperial College of Science, 8 in use; University of Wales; Pharmaceutical Society; Guy's Hospital, Bacteriological Department; and many of the leading Breweries and Drug Houses, etc. etc.

Pamphlets & particulars forwarded on application

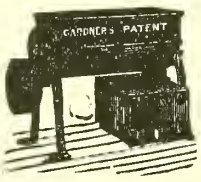
Estimates submitted free if required for supplying and fitting complete.

BROWN & SON, Muriel St., King's Cross, London, N.

GARDNER'S PATENT

"RAPID" SIFTERS & MIXERS

OVER 4,000 working in almost every Trade where POWDERS are Sifted and Mixed and Lumps Reduced, all being done at one operation and without loss by dust.



FOR HAND OR POWER.

From 55/- to £90.

CATALOGUES FREE.

WM. GARDNER & SONS, Engineers, GLOUCESTER.

A SPECIAL 5% BONUS

over and above the usual terms and discounts will be allowed on all orders of not less than £1 in value received between 10th and 31st January, 1916, for

PLASMON COCOA

AND

PLASMON OAT-COCOA

Plasmon Oat-Cocoa is retailed at 4½d., 8½d., and 1/4 for ¼ lb., ½ lb. and 1 lb. tins respectively. The trade prices, **exclusive of all discounts,** show a profit of 3d. per lb.

Our new Plasmon Cocoa and Plasmon Oats Cut-outs are each about 16 × 10, and are very attractive.

ALL BRITISH.

NO ADVANCE IN PRICES.

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The SALVARSAN and NEO-SALVARSAN Substitutes—

Galyl

Hectine

Hectargyre

Ampsalvs
Diabetifuge
Iodargol
Iodeol
Mersalv
Supsalvs
Uraseptine

BOUGIES. TAMPOVULES

Sole Agents for the British Empire—

M. BRESILLON & CO., Gamage Buildings, LONDON, E.C.

Telephone: 1311 Holborn. Telegrams: "Ampsalvas London."

DODGE & OLCOTT CO.,

20 MARK LANE,
LONDON, E.C.

THE "D & O" BRAND

is the "Standard of Quality" for

OILS of BAY, CEDARWOOD, PATCHOULI, PEPPERMINT, SASSAFRAS, ETC.
BALSAMS of Copaiba, Peru, Tolu.
TONKA BEANS Angosturas.

'Phone: CITY 2468.

Telegrams: "EGDARF, FEN, LONDON."

OKELL'S ORIGINAL MONA BOUQUET.

(First introduced by the late JOSEPH O'KELL).

Registered Trade Mark, "DOUGLAS PIER."

The most popular and best-selling perfume in the market.
Retail Prices ... 1/-, 1/9, 3/6, 6/-, 7/6, 10/6, per Bottle.

ALSO 3d. SAMPLE BOTTLES.

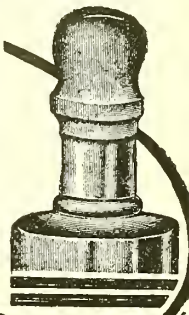
Shippers and Wholesale Buyers supplied on the best terms by
THOMAS WEST & SON, 1187 Chester Road, Stretford, MANCHESTER.

ABOVE ALL
for Ease, Elegance & Economy.

Air-tight and spirit-proof, they provide a hermetic seal which effectively protects the bottle's contents. They fix themselves!

Send for the descriptive list.

The Viscose Development Co., Ltd.,
Pembroke Road,
Bromley, Kent.



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SELF-FIXING BOTTLE CAPS

SAM^L LAMBERT & CO.,

14 MINCING LANE, LONDON, E.C.

Importers and Exporters.
First hands for all

Estd. 1870.

CRUDE DRUGS & ESSENTIAL OILS.

A few Specialities :—

ARABIC GUMS, CASCARA SAGRADA, ERGOT, CITRIC ACID, COD LIVER OIL, CREAM OF TARTAR, GLYCERIN, HONEYS, MESSINA ESSENCES, OLIVE OIL, PEPPERMINT OIL, QUININE, QUICK-SILVER, RHUBARB, SARSAPARILLA, SHELLAC, TURPENTINE.

Sole Agents for:

Oils: Lemon, Bergamot, Orange; Terpeneless Oils: Lemon, Bergamot, Orange.—*Fratelli de Pasquale & Co., Messina.*
Bay Rum and Bay Oil.—*Bornn, St. Thomas.*
Essential Oils, Drugs, Chemicals, &c.—*National Aniline & Chemical Co., New York.*

— 950 —

of our employees are serving with His Majesty's Forces. Most of them are now in the fighting line.

We have thousands of orders awaiting delivery. The Railway Companies cannot handle traffic quick enough.

We shall be very glad indeed if you will kindly oblige us by placing your orders with our representatives as soon as possible for forward delivery. It is impossible to get goods delivered straight away.

The sooner we obtain the orders, the sooner you will get supplies.

ERASMIC,
Perfumers,
WARRINGTON.

"ERASMIC"

Gives a delightfully creamy lather which does not dry on the face.

10d per stick in Nickel Case.

"ERASMIC" *Perfumers,* LONDON & PARIS.

"LESCOL" FLORAL PERFUMES

In 50 Different Odours. For Home & Export, to suit all Markets.

LINES FROM 1d. TO A GUINEA.

YOUR ATTENTION IS DRAWN TO OUR

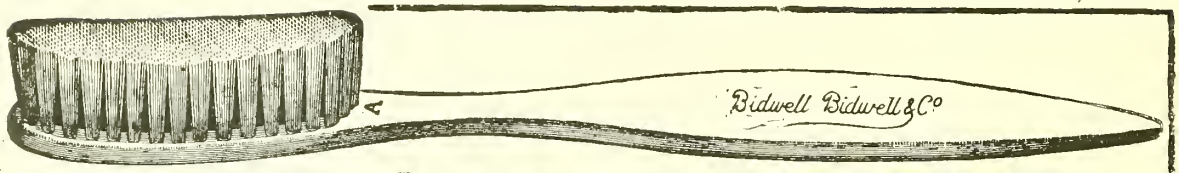
EAU DE COLOGNE In All Sizes. Own Manufacture

Also LAVENDER WATERS, SMELLING SALTS, BRILLIANTINES, and all Toilet Preparations.

Write for our NEW PRICE LIST (Illustrated in Colours), showing our very attractive New Lines, to the

LESCOL PERFUMERY CO., Lomond Grove, Camberwell Green, LONDON, S.E.

Telephone: 810 HOP. Telegrams: "VANILLIN, CAMBER, LONDON."



BIDWELLS' TOOTH BRUSHES.

NO LOOSE HAIRS.

Please send for Catalogue—

BIDWELL, BIDWELL & CO., Ltd., AXMINSTER, DEVON.

LONDON OFFICE: BUSH LANE HOUSE, CANNON STREET, E.C.

SUPPORT HOME INDUSTRIES.

Estd. 1777.

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BUY KENT'S BRUSHES.

Summer Issue, 1915, pp. 62, 63.
Diary, 1916, pp. 96, 97.

THE WAR OFFICE HAS AUTHORISED the use of

"VERMIJELLI"

by the Troops, after very exhaustive investigation by the R.A.M.C., on the relative values of Vermicidal substances.

NON-POISONOUS. NON-INFLAMMABLE. MIXES WITH WATER.

The efficacious preventative and remedy for Lice, Fleas and other vermin.

Wholesale from *Sole Manufacturers:*—

S. BOWLEY & SON, Wellington Works, Battersea Bridge, London, S.W.

Prices: 1 lb. Tins ...	1/- each ...	...	1/4 each	Post paid in U.K.
2 lb ,, ...	6/9 ,, ...	...	7/9 ,,	
Collapsible Tubes 9d. ,,	...	...	1/- ,,	

For FOUNTAIN PENS and all Pens the Best.

Dichroic Ink

Makes Writing Easy

Proprietors:

Bewley & Draper, Ltd., Dublin.

6d.

Make your old Hat a new one.

In bottles, 6d. each, in separate neat cartons, with suitable brush.

These Dyes are a distinct invention, dyeing the straw without an objectionable varnished appearance, and producing the effect of new goods.

NO GLOSS.
NO POLISH.

On the P.A.T.A.

Write for terms, patterns, also leaflet of testimonials.

"Luton" HAT DYE

WHITAKER & CO., COLOUR WORKS, KENDAL, ENG.

London Depot: 60-62 Clerkenwell Road, E.C.

"Glossy" Series supplied if desired.

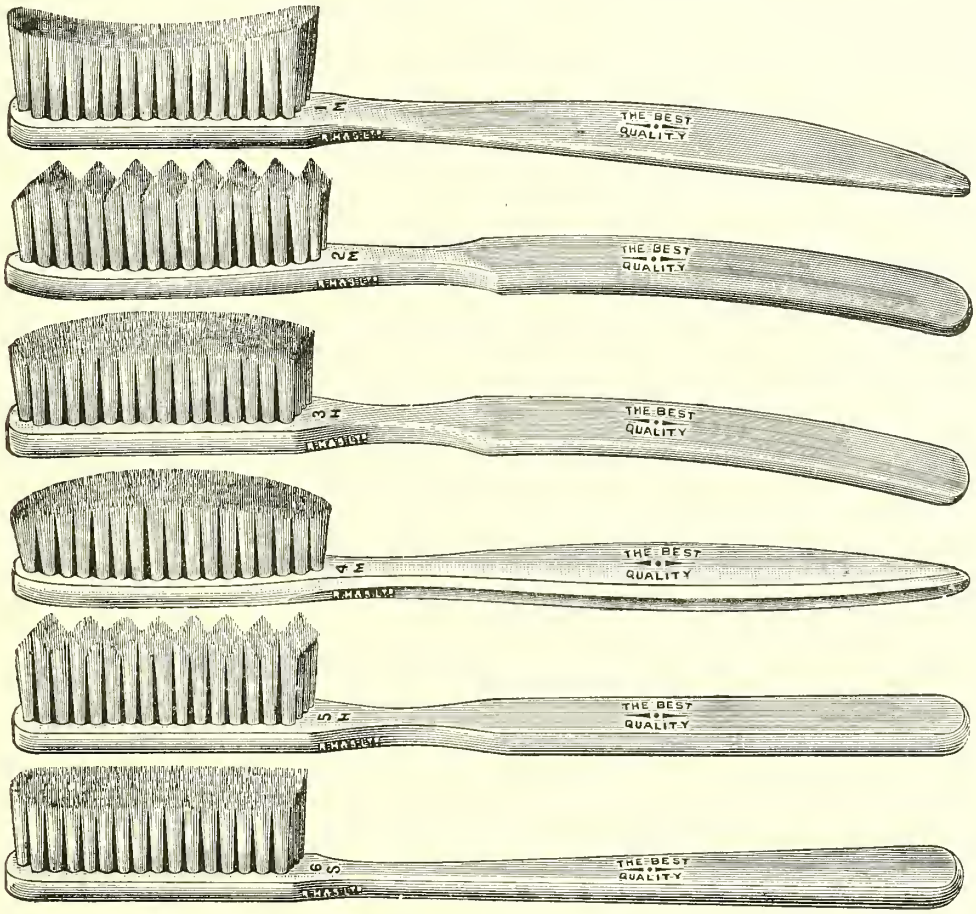
Special Non-Inflammable Series for Export. *Est. 1878.*

Telegraphic Address: "Dullette Kendal." Telephone: No. 214.

HOVENDEN'S TOOTH BRUSHES. BEST QUALITY.

Waxed Backs, Wire Drawn, Highly Finished. Twelve Patterns in each Box.

THE FOLLOWING ARE A FEW ILLUSTRATIONS :—



No. 1.

No. 2.

No. 3.

No. 4.

No. 5.

No. 6.

6/6 per dozen; or 75/- per gross.

Customers can have name and address STAMPED FREE on orders of 1 gross and upwards. Write for sample dozen of these excellent Tooth Brushes.

THE HYGIENIC TOOTH BRUSH.

BEST WAXED AND ASSORTED PATTERNS. 6/6 per dozen; or 75/- per gross.

Subject to 2½% Cash Discount. A copy of our Monthly List will be forwarded on application.

R. HOVENDEN & SONS, Ltd.

29, 30, 31, 32, & 33 BERNERS ST., OXFORD ST., W. Tel. No.: Museum 2810 (3 lines).
And 89, 91, 93, & 95 CITY RD., FINSBURY, E.C. Tel. No.: 6260 London Wall (2 lines).

LONDON.

"It's ALL in the edge."

Safety Razor Blades Resharpened.

SINGLE EDGE, 6d. per dozen.

DOUBLE EDGE, 8d. per dozen.

SPECIAL PRICE FOR QUANTITIES.
WRITE FOR LEAFLET.

If you are not interesting yourself in this business you are missing an opportunity to make profit.

Window Cards and Leaflets Free.

WILLIAM P. KELLAND,
36 Camomile Street, LONDON, E.C.,
and at
GLASGOW, BELFAST, LIVERPOOL & LEEDS.

THE BRYTSTELE OUTFIT

For Safety Razors

Safety Razors kept in a Brytstele Bath do not require to be taken apart for cleaning or drying. Brytstele Solution keeps blades sharp for at least two months without stropping. Blades and Holders are kept bright, antiseptic, and free from rust.

ATTRACTIVE OUTFITS
AS ILLUSTRATED.

Retail 2s. each ... Trade 17/- doz.
Refill Bottles (4 oz.)
10d. each ... ... „ 7/- „
Refill Bottles (10 o z.)
1s. 8d. each ... „ 13/- „

Carriage paid on dozens only. Good Showcards, etc.

THE BRYTSTELE Mfg. Co., 106 High Street, Camden Town, N.W.

Dr. EVAN WILLIAMS' Henna Shampoo

KEEPS THE HAIR YOUNG

FIRST on the market and still FIRST in favour. A *class* product highly valued by ladies everywhere. Sells freely at a substantial profit.

Order direct or of your Wholesaler. Specify "Dr. Evan Williams," and sell the genuine article.

Descriptive Price List free.

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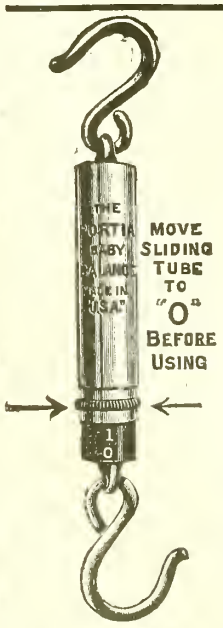

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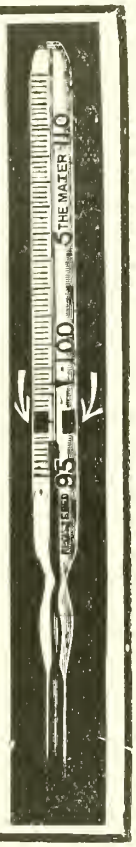

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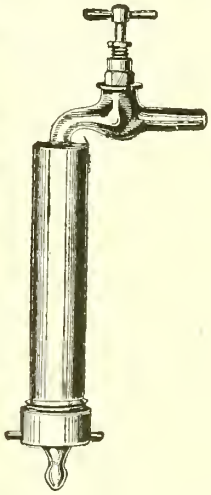

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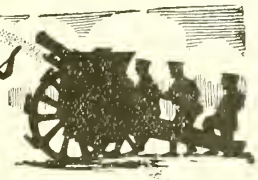

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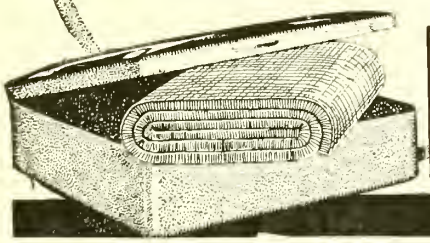

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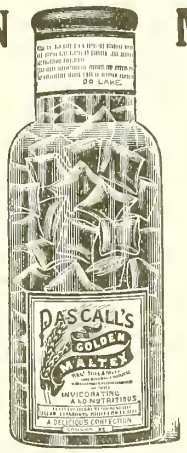

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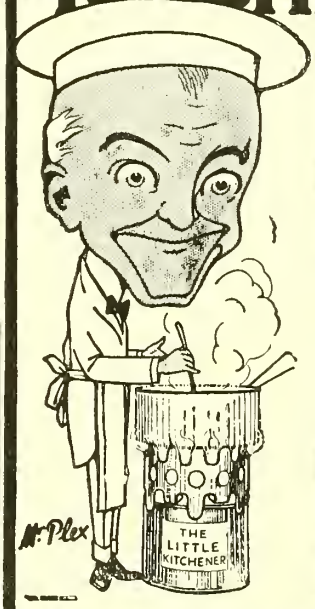

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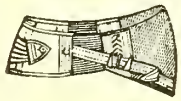

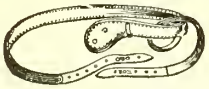

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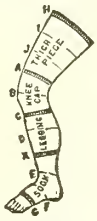

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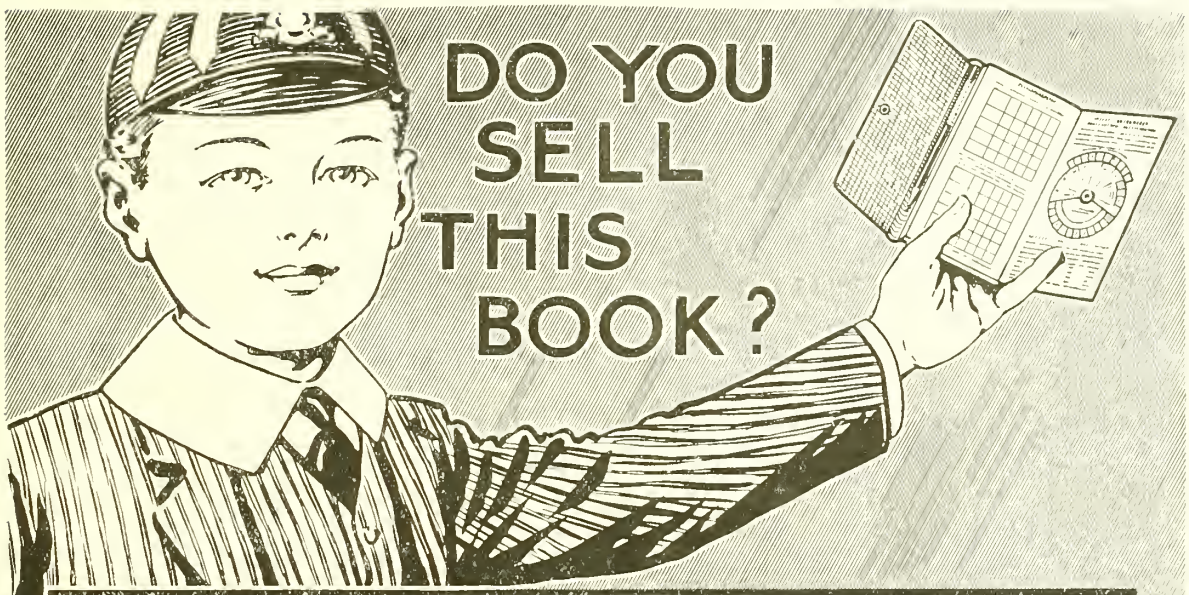

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Summary.

A comprehensive index for the volume of the *C. & D.* for July-December 1915 is printed between pp. 54 and 75.

The police give notice that dogs whose licences are not to be renewed should be poisoned. Mr. Cornelius Bayley's article on the subject is, therefore, particularly timely. See p. 44 .

Panel chemists will have to submit to further discount from their accounts, as the expenses of Pharmaceutical Committees are to be deducted from them. Read the article on p. 46.

The Knighthood conferred on Mr. R. A. Robinson, ex-President of the Pharmaceutical Society of Great Britain, is to pharmacists the most conspicuous item in the New Year's honours list (p. 37 and p. 47).

The Society of Chemical Industry, at the meeting of the London section, had four papers to discuss. Perhaps of greater interest were the exhibits of chemicals and chemical porcelain and glassware of British manufacture (p. 53).

The "salt" given to our analytical students last month contained potash alum, zinc phosphate, and ammonium magnesium phosphate. Dr. Dobbin gives students valuable hints in regard to the qualitative analysis of such a mixture. Mr. J. T. Bell and Mr. W. J. Hough get the prizes (p. 35).

The market changes of the week include 4*d.* on Howards' quinine sulphate. Hypophosphites are dearer; caffeine remains at a famine price; hydroquinone, cocaine, emetine, and menthol are firmer; formaldehyde and lanoline are easier, but Persian opium is still a rising market. Heavy chemicals generally are unchanged, with great uncertainty as to obtaining delivery (p. 54).

Sir William Ramsay suggests that steps should be taken to ensure that the large munitions factories are available after the war for the purpose of manufacturing in this country chemicals hitherto obtained from Germany. We suggest that the chemical manufacturers might form a defensive committee for the purpose of meeting difficulties with which the trade may be faced on the conclusion of hostilities (p. 47).

European War.

A Year Ago To-day.

(*War News in "C. & D.," January 9, 1915.*)

We dealt editorially with the effect of the war upon the supply of fine chemicals and with the trading which was being carried on with the enemy by some dealers in chemicals made in Germany. The notorious case of the Continental Tyre and Rubber Co. (Great Britain), Ltd., was commented on. The company, although German owned, it had been decided, has the privileges of an English company. We referred to a pamphlet by Mr. N. H. Martin, in which the author dealt with the position of chemical-industry in this country. Mr. Wellcome's scheme for obtaining improvements in field motor-ambulances was published and many other interesting items connected with the war were given.

Pharmaceutical Roll of Honour.

Non sibi sed patriæ.—CICERO.

SIXTY-EIGHTH LIST.

APLIN, J. H., JUN., pharmacist, and Howard S. Aplin, pharmacist, sons of Mr. J. H. Aplin, chemist, Trowbridge, Wilts, Army Reserve B.

DAVIES, W. OSWAL, chemist and druggist, Pontypridd, Glam., Army Reserve

HANCOCK, S. R. (Midland representative of Evans Sons Lescher & Webb, Ltd.), Army Reserve B.

HARRISSON, J. (town representative of Evans Sons Lescher & Webb, Ltd.), Army Reserve B.

HAYNES, HARRY, Small Heath, Birmingham, sergeant R.A.M.C. (Mr. Haynes enlisted after he passed the Minor in July, and has since September been attached to an ambulance train in France, having been promoted to the rank of sergeant.)

HUGH-WILLIAMS, THOMAS (lately assistant with Mr. Alex. Macsween, chemist, Glasgow), 15th Battalion Argyll and Sutherland Highlanders.

JONES, T. ERNEST, chemist and druggist, Taff Street, Pontypridd, Glam., Army Reserve.

MACKAVOY, E. H. (town representative of Evans Sons Lescher & Webb, Ltd.), Army Reserve B.

Trading with the Enemy.

Mr. L. Worthington Evans, M.P., has undertaken the direction of a new Department, with the title of Controller of the Foreign Trade Department of the Foreign Office, which is located at Lancaster House, Pall Mall, London, S.W. The new Department has been set up to carry out the policy embodied in the Trading with the Enemy (Extension of Powers) Act, 1915. The advice and assistance of business men will be invited through the Chambers of Commerce and other trade organisations. It is recognised that the success of the office will depend upon the active co-operation of the business community.

Australian Trading with the Enemy Act.

The High Commissioner for Australia has received advice from the Commonwealth Government to the effect that a Proclamation, dated December 8, was published in the Commonwealth "Gazette" of December 11, prohibiting the importation, except with the permission of the Minister for Trade and Customs, of—

(*a*) Goods manufactured or produced in or brought directly or indirectly from an enemy country.

(*b*) Goods manufactured or produced or owned by or purchased from any person who is an enemy within the meaning of any proclamation by the King relating to trading with the enemy.

(*c*) Goods manufactured or produced or owned by or purchased from any country which the Attorney-General, by notice published in the "Gazette," declares or has declared to be, in his opinion, managed or controlled directly or indirectly by or under the influence of or carried on wholly or mainly for the benefit or on behalf of persons of enemy nationality or residence, or carrying on business in an enemy country, and

(*d*) Goods upon or in connection with which there is used a trade-mark, the proprietor whereof is declared by the Attorney-General, by notice in the "Gazette," to be, in his opinion, a subject of a State at war with the King within the meaning of the Patents, Trade-marks, and Designs Act, 1914-1915.

A list of proprietors under the heading (*d*) is now being prepared.

Personalia.

CAPTAIN HORACE R. HASLETT, 9th Battalion Royal Irish Rifles, has so far recovered from his injury as to be able to be moved to London for special treatment (*C. & D.*, January 1, p. 2).

CAPTAIN J. M. HENDERSON, 8th Battalion Royal Irish Rifles, who has been invalided home suffering from shell-shock, is a brother of Mr. David Henderson, Ph.C., 549 Lisburn Road, Belfast.

Captain W. M. Macaw, Headquarters Staff, 6th Canadian Infantry Brigade, who has been wounded in France, is a nephew of Mr. Frank McMullan (Thos. McMullan & Co., Ltd., chemists and druggists, Victoria Street, Belfast). Captain Macaw, who is reported to be progressing favourably, emigrated from Belfast to Winnipeg a few years ago.

Sergeant Cecil Willcox, of the R.A.M.C., Mediterranean Forces (lately with Messrs. Shadford & Co., chemists, Spalding), writing to his parents at Spalding, says: "I suppose you are curious why I transferred from the Royal Engineers. I thought I would try again whether my work before the war would do anything. Luckily, this time, I happened to apply at the right time. The ambulance I am now with had had a dispenser go away, and wanted one to fill his place, so I was exchanged for another just before the move started. When we got on ship the O.C. asked me a few questions about dispensing. Apparently he was satisfied, for yesterday he sent for me again, and I was made sergeant. Of course, the dispensing work here is altogether different from the work in a shop, but we have not been in action since I joined."

Mr. C. C. Duncan, F.I.C., F.C.S., was the subject of some remarks by Mr. Willis Bund, Chairman of the Worcestershire Quarter Sessions, at the sitting on Monday, January 3. The War Office asked Mr. Duncan to take service in the Army, but refused to give him a commission. Mr. Duncan had been recommended by the Institute of Chemistry, and he went to France with the rank of corporal to analyse water which might be poisoned by the Germans. According to the rule laid down by the County Council, that employés who enlist should not be at a financial loss, his salary of 500*l.* was made up, and a good deal of dissatisfaction was expressed by county councillors. Unfortunately, the matter was taken up by "Truth," and that made it more difficult to get any alteration. The other day Mr. Duncan came to see him (Mr. Bund), and he noticed that he had two stars on his epaulet. Mr. Duncan then told him of the incident at the Front, as the result of which he was given a commission. It appeared that Mr. Duncan was seen by a Staff officer instructing soldiers in the art of handling bomb grenades, and for his services he was given a commission. As a second-lieutenant he was sent to Boulogne and was put in charge of some of the explosives landed there. Occasionally some of the railway wagons carrying munitions went off, and it was thought to be due to spontaneous combustion. Mr. Duncan put it down to a German spy, but he looked into the matter, and he found in the wagons a fragment of a shell. He went to the French authorities and was permitted to watch some firing practice, and he then found that some shots ricocheted in the direction of the railway station, and there could be no doubt that this caused the ammunition-wagons to explode. He reported the matter to headquarters, some change was made, and he was promoted to be a lieutenant.

Miscellaneous

Belgian Doctors' and Pharmacists' Relief Fund.—Collected at the Pharmacists' V.T.C. Camp, per Commandant E. A. Atkins, 4*l.* 11*s.* 6*d.*

A Dispenser's Experience.—An "Exonian," in the "Western Times," writes of his experiences as a dispenser in Serbia and Montenegro with the British Red Cross staff. The writer left Avonmouth in June and arrived back within the last few weeks after exciting adventures due to the invasion of Serbia by Bulgarians and others.

Supply of Spectacles.—Mr. John H. Sutcliffe, Clifford's Inn Hall, Fleet Street, London, E.C., is superintending a Government scheme for the supply of spectacles and ophthalmic appliances to the Army, and for the employment, for the duration of the war, of (*a*) a voluntary staff of opticians for part home service, and (*b*) a permanent staff of opticians for home and foreign service. Mr. Sutcliffe has also been entrusted with the task of preparing a list of opticians at present serving with the Forces.

The Salvarsan Patents.—The Board of Trade has granted a licence to the Soc. Anon. les Etablissements Poulenc Frères to use the following patents for the manufacture of salvarsan and neosalvarsan: No. 3934/07, belonging to the Curatorium der Georg & Franziska Speyerschen Studienstiftung, and Nos. 13485/10, 5595/11, 11625/11, 7865/12, 8219/12, and 15931/12, belonging to the Farbwerke vorm. Meister, Lucius & Brüning. (See *C. & D.*, October 31, 1914, p. 40, November 14, 1914, p. 53, and February 20, 1915, p. 53.)

In a Christmas Shooting-competition in connection with the Leicester Citizens' Volunteer Corps Platoon-Sergeant G. E. Marfitt was top scorer of the battalion, being the only member to obtain a "possible"—*i.e.*, 70—with seven rounds, twenty-five yards range, miniature rifles, open sights, N.R.A. Roberts' targets, ½ in. bull=10. He was also second in a recent rapid-firing contest, scoring 89 with ten shots (without magazine), loaded and fired in sixty seconds, being beaten only by an old Army man, who was a special "sniper" in the Boer war. Smaller targets were used in this case.

Exports to Switzerland.—The Director of the War Trade Department desires to call the attention of exporters to the fact that persons who have already lodged applications for licences to export to Switzerland which have not yet been granted or refused, should instruct their consignees to procure the necessary certificate from the Société Suisse de Surveillance Economique at Berne (hereinafter referred to as the S.S.S.), and should forward it when received to the War Trade Department, quoting in the case of each certificate the number of the application to which it refers. Steps are, however, being taken by the Foreign Office to procure from the S.S.S. with the least possible delay acceptance certificates in respect of goods for which guarantees have been furnished in the usual form to H.M. Legation in Berne, but for which licences had not been either granted or definitely refused before December 20. In the case of licences which have already been issued and which have expired before shipment has been made, it will be necessary for exporters to return the expired licence to the War Trade Department and to make a fresh application accompanied by S.S.S. certificate. Information in regard to the S.S.S. can be obtained at the London Bureau of the Society, which is at 7 Princes Street, Westminster. See also *C. & D.*, December 25, 1915 (p. 40).

New Books.

Any book published in the United Kingdom can be supplied to our subscribers at the price quoted, *plus* postage at the rate of 2*d.* for the first hundred pages and 1*d.* per 100 beyond. Orders, with remittance, should be sent to the Publisher, 42 Cannon Street, London, E.C.

Houghton, Dr. E. M. *Collected Papers from the Research Laboratory, Parke Davis & Co., Detroit, Mich. Reprints.* Vol. 3. 1915. Pp. 341+iv. [This volume contains twenty-two papers, chiefly pharmaceutical and physiological. Among the former are "U.S.P. Menstrua," by H. C. Hamilton; "The Sterilization of Adrenalin Solutions," by L. W. Rowe; and "The Pharmacy of Adrenalin," by C. P. Beckwith. We reserve our remarks on Dr. McCord's paper on the Pineal Gland, one of the most interesting of the physiological papers, another being on Hog-cholera by W. E. King and R. H. Drake. A paper, by H. C. Hamilton, on Disinfection, and another on an Expanding Root-canal Filling, by G. B. Harris, are also interesting articles.]

Warwick, F. J., B.A., M.B., M.R.C.S., L.S.A., A.K.C. Lond., Major R.A.M.C. (T.), South Midland Field Ambulance, and Tunstall, A. C., M.D., C.M., F.R.C.S., L.R.C.P., Major R.A.M.C. (T.), Rtd., Commanding R.A.M.C.'s 1st Brigade London Division National Reserve. *First Aid to the Injured and Sick: An Advanced Ambulance Handbook.* Ninth edition. Pp. 246+xiv. 1*s.* net. (John Wright & Sons, Ltd., Bristol, and Simpkin, Marshall, Hamilton, Kent & Co., Ltd., London.)

Warwick, F. J., B.A., M.B., M.R.C.S., and Tunstall, A. C., M.D., C.M., F.R.C.S., L.R.C.P. *Questions on First Aid to the Injured and Sick* (to be used in connection with the ninth edition of "First Aid to the Injured and Sick"). Pp. 38. 6*d.* net. (John Wright & Sons, Ltd., Bristol, and Simpkin, Marshall, Hamilton, Kent & Co., Ltd., London.) [The first edition of this work was published in 1901, and now the ninth edition brings up the total issue to 120,000 copies. The first part of the book is anatomical and physiological, and describes in clear language the structure and functions of parts and organs of the human body. This occupies sixty pages, and the greater part of the book that follows, extending to 168 pages, comprises ten chapters dealing with bandages, hæmorrhage, wounds, sprains, dislocations and the like, asphyxia, poisons and their treatment, insensibility and fits, burns and scalds, transport of the sick and wounded, and preparation for the reception of accident and sudden illness cases. It incorporates the new R.A.M.C. stretcher drill. "First Aid" is well illustrated and is an excellent shillingsworth. The "Questions" is a useful supplement.]

Medical Reform.—Mr. Charles A. Parker, F.R.C.S. Edin., advocated in "Progress," October 1912, that the medical profession should be a State service; he has since, in the "Medical World," shown how the National Insurance Act fails to effect its purpose, and how the organisation could be employed in furtherance of a scheme of national medical supply. Both these papers have been republished in pamphlet form.

Corner for Students.

Conducted by Leonard Dobbin, Ph.D.

Communications should be addressed "Corner for Students, 'The Chemist and Druggist,' 42 Cannon Street, London, E.C."

QUALITATIVE ANALYSIS.

A MIXTURE of not more than three salts will form the subject of the next exercise in qualitative analysis. The mixture will comprise acids and inorganic bases occurring in the British Pharmacopœia, and is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a *stamped and addressed envelope*, not a stamp merely) will be received up to Tuesday, January 11, on which day the samples will be posted. Students' reports will be received up to Saturday, January 22. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

The analysis announced above forms the third exercise in the analytical tournament for the current winter session. The usual monthly first and second prizes in this series of analyses will be awarded only to apprentices or assistants who are preparing for the Qualifying examination of the Pharmaceutical Society of Great Britain or of Ireland, which fact *must be attested on their reports*. Students who adopt a *nom de plume* must adhere to it throughout the tournament.

Report on the December Analytical Exercise.

The powder distributed for analysis on December 7 contained 7 parts by weight of potassium aluminium sulphate (potassium alum), 2 parts of ammonium magnesium phosphate, and 1 part of zinc phosphate. The calculated composition of such a mixture is:

Al	4.0
Zn	3.0
Mg	2.0
K	5.8
NH_4	1.5
SO_4	28.3
PO_4	13.6
H_2O	41.8
	100.0

Samples of the powder were distributed to fifty-seven students, and thirty-eight reports were submitted for examination. In every case the presence of the sulphuric-acid radical was reported, and only two students failed to detect the phosphoric-acid radical. The failures in the detection of the metallic radicals were: Aluminium, 10; zinc, 24; magnesium, 13; potassium, 6; ammonium, 5. Eight students failed to report the abundant evolution of water which took place when the powder was heated in a dry test-tube.

In the systematic treatment of this mixture for the detection of metallic radicals, the precipitate produced when ammonium chloride and excess of ammonia were added as group-reagents contained the phosphoric-acid radical, so a special method had to be adopted in examining this precipitate. Students who recognised this necessity adopted methods varying from one another in certain particulars, but all depending eventually upon the separation of part of the phosphoric-acid radical as ferric phosphate. In preparing the mixture, the quantities of the ingredients were so arranged that it contained a little more of the phosphoric-acid radical than was required to convert the whole of the aluminium into phosphate; hence in the systematic analysis the original ammonium chloride and ammonia precipitate should have contained, as phosphate, all the aluminium and part of the magnesium, while it should have been free from zinc if enough ammonium chloride and due excess of ammonia were added. In some cases the latter conditions do not appear to have been fulfilled, with the result that the zinc seems to have been included mainly or entirely in the precipitate, and, as was very likely to happen, to have been lost sight of in the subsequent treatment of it. The accompanying tabular arrangement of some analytical facts regarding the systematic examination of the powder for the metallic radicals, in the known presence of a phosphate, shows, so far, and among other things, what we regard as the simplest procedure that could be adopted in this analysis. We commend to our correspondents a careful study of the various operations mentioned in the following table, with a view to their mastering the significance and the results of each.

Treatment of the original HCl solution of the powder after passing H_2S, boiling out the latter, adding a few drops of HNO_3, and boiling again:

NH_4Cl added in moderate quantity and NH_4OH added in distinct excess produced a white precipitate.

Precipitate: After thorough washing, was dissolved in the minimum quantity of dilute HCl; Na_2CO_3 was added till the solution was almost neutral, the formation of a permanent precipitate being only just avoided; then large excess of NH_4Ac and dilute HAc in moderate quantity were added, and the mixture was gently heated for a short time. A white precipitate resulted.

Precipitate: After thorough washing, it dissolved completely when suspended in water and treated with Na_2O_2, whereby the absence of Fe was proved. The resulting solution was colourless and did not give the reactions of a chromate, whereby the absence of Cr was proved. When tested for $AlPO_4$ this was found to be present. A small quantity of the original precipitate, when tested for Al by the test referred to elsewhere in this report, gave a most distinct positive result.

Filtrate: Was found to contain the PO_4 radical; therefore it could not contain more than traces of Al or Fe. It might, however, contain Ba group metals and Mg, therefore it had to be submitted to the usual ferric-chloride treatment to eliminate the PO_4 radical. The filtrate from the ferric phosphate and acetate gave with NH_4Cl and excess of NH_4OH a very slight precipitate of $AlPO_4$, and the filtrate from the latter gave the reaction for Mg. Several students also tested this filtrate for K, which it should not contain.

Filtrate: Was found to be free from the PO_4 radical; hence, besides metals of the Zn and alkali groups, for which alone it would have required to be tested in presence of this radical, it had to be tested for metals of the Ba group and for Mg. It actually contained Zn, Mg, and K, which were easily recognised in the routine examination.

Several students altogether omitted to examine this filtrate, whereby they failed to detect Zn and, in some cases, K.

Those students who made deviations from this general plan, but arrived at the same results, may find it of interest to compare it with their method, and those who arrived at inaccurate results may be able to see exactly where their procedure was not correct.

A good deal of uncertainty frequently exists regarding the presence or absence of aluminium. The difficulty in this connection is very materially diminished, if not indeed altogether removed, by applying the delicate test described by Atack in the "Journal of the Society of Chemical Industry," September 30, 1915, p. 936. The reagent employed is a 0.1-per-cent. aqueous solution of alizarin (red) S. One c.c. of this solution is added to about 5 c.c. of the neutral or acid solution (free from metals of Groups I. and II.) which is to be tested for aluminium; ammonia is added in excess (indicated by the solution assuming a purple colour); the liquid is boiled for a few seconds and is then allowed to cool. On adding to the cold solution excess of dilute acetic acid, a red coloration or a red precipitate remains if aluminium was present, while a pale-yellow solution results in the absence of aluminium. The presence of the phosphoric-acid radical appears to be immaterial. It is desirable to practise with known solutions containing aluminium in various proportions before applying the test to unknown solutions.

Students who applied the ferrous-sulphate and sulphuric-acid test for nitrates will be interested in the reply to "Senex" below. The large number who failed to detect zinc may find the explanation of their failure in one or other of the observations regarding zinc in the foregoing. We failed to obtain any evidence of the presence of manganese or of calcium—metals which were reported by some students as impurities, and by others as main constituents of the powder.

PRIZES.

The First Prize for the best analysis has been awarded to JOHN T. BELL, 12 Nichol Street, Benwell, Newcastle-on-Tyne.

The Second Prize has been awarded to WM. I. HOUGH, 16 Market Street, Marple, Cheshire.

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

MARKS AWARDED FOR ANALYSES.

1. *Correspondents who are unqualified:*

John T. Bell (1st prize)	99	Enzyme	80
Wm. I. Hough (2nd prize)	95	Ferrum	76
Chlorine	94	Bennachie	74
Un yn Trio	94	A. L. F.	73
Conor	93	Dominus	72
Parvus	93	Junior	70
Alkaloid	87	Fuddler	68
Belladonna	86	Resurgam	68
Senex	86	Osmium	67
Nomen	85	Barrovian	66
L. K. Griffiths	83	Liq. Nitritum	65
Atom	81	Onyx	60
Ethyl	81	Xenophen	58
Legume	81	G. K. W.	54
Mox	81	Victory	53
Nectotropic	81	Yub-Dubs	51
Parex	81	Spes	50
Cornubia	80	Altior	44

2. *Correspondents who are qualified:*

Colombo	70	Nitrax	69

TO CORRESPONDENTS.

CHLORINE, UN YN TRIO, and Others.—Zinc should not have been present in the original precipitate produced on adding ammonium chloride and excess of ammonia if these reagents were added in moderate quantity and in moderate excess respectively.

PARVUS.—More information should have been given regarding acid radicals: proof of the absence of several important radicals was not contained in your report.

ALKALOID.—In the present analysis, and, generally, when iron-group metals are present along with the phosphoric-acid radical, the table printed in the foregoing outlines the simplest treatment to adopt. It is well to get iron-group phosphates removed as completely as possible from other constituents of the mixture before proceeding to the acetate separation.

BELLADONNA.—The filtrate from group 3 should have been examined not only for alkali metals, but also for metals of the zinc and barium groups and for magnesium. See the third column of the accompanying table.

SENEX.—Your detection of a trace of the nitric-acid radical by means of Tingle's test led to some interesting observations. We repeated your experiment and obtained, as you did, a slight but unmistakable yellow coloration. The usual test for nitrates by means of ferrous sulphate and sulphuric acid was then applied with great care to solutions containing very considerable quantities of the powder, but no recognisable reaction could be obtained. Tingle's test was next applied to the separate ingredients of the mixture, with the result that the zinc phosphate, the potassium alum, and the ammonium magnesium phosphate gave, respectively, no indication, a barely recognisable indication, and a well-marked indication. Finally, dilute sulphuric acid was saturated with as much of the ammonium magnesium phosphate as it would take up, and when the ferrous-sulphate, etc., test was applied to this solution a faint but distinct darkening at the interface could be recognised.

NOMEN and LEGUME.—Preliminary tests did not, in our hands, give any indication of the presence of manganese.

ATOM.—Note that chromic hydroxide dissolves with the greatest readiness in solution of sodium hydroxide; the solution, however, unlike the corresponding solution of aluminium hydroxide, is reprecipitated on boiling for some time.

BENNACHIE.—You failed to find any metallic radical in the original phosphate precipitate. Probably the hydrochloric-acid solution of it contained too much of this strong acid when you added sodium phosphate and acetate with a view to precipitate iron-group phosphates.

FUDDLER.—Contrary to what you report, the powder did not dissolve entirely when warmed with solution of potassium hydroxide: a portion consisting of magnesium phosphate or hydroxide remained undissolved. Try whether or not the supposed pure peroxide of manganese gives off chlorine when heated with sulphuric acid alone.

RESURGAM.—You rejected, unexamined, the filtrate which contained the zinc, the potassium, and a large part of the magnesium, and you tested for potassium in a solution from which it ought to have been (as you report it was) absent.

OSMIUM and NITRAX.—Having failed to detect the phosphoric-acid radical, you followed the routine method for non-phosphate mixtures, and you were certain to fall into other errors in consequence. Make sure that you have a suitable solution of ammonium molybdate and study the conditions necessary for its successful application.

LIQ. NITRITUM.—You do not mention boiling out the hydrogen sulphide before adding ammonium chloride and excess of ammonia; if you omitted to do this, the original precipitate would contain much or the whole of the zinc as sulphide, and the latter might readily escape detection later.

ONYX.—It is not quite apparent what you mean when you report that the yellow precipitate of silver phosphate was "almost soluble in hydrochloric acid"; surely the yellow colour disappeared and a white residue of silver chloride was left.

XENOPHEN.—You appear to have got into a tangle in dealing with the phosphate complication. Study the separation method in any good modern text-book and practise upon varied simple mixtures until the manipulation and the principles are both mastered. The table printed in the general remarks may be of assistance to you now, and perhaps more so later.

G. K. W.—Organic salts are not excluded from these exercises; only organic bases.

YUB-DUBS.—Your report in many places conveys little information as to what you did. It is useless to report that a certain test was applied for a certain metal, and that the result was "negative," if you omit to state what the test was applied to—*e.g.*, to the original solid or to a solution, and if the latter, how prepared—what was observed, and what deduction was arrived at. You withhold much of the information which is essential to assessing the value of your work and of the conclusions you arrive at.

SPES.—Iron must have found its way into your solutions in the course of the analysis, as the powder contained no more than a distinct trace.

COLOMBO.—You appear to have fallen into difficulties in dealing with the phosphate complication. The precipitate which you supposed to be calcium citrate was really calcium phosphate.

Almanacs and Calendars.

E. DUNCAN DORING & Co., glass factors and importers, 1 Gresham Street, London, E.C., have issued a useful pocket-wallet containing a writing-tablet and memorandum-book and receptacles for cards and stamps.

MR. W. P. KELLAND, 36 Camomile Street, London, E.C., sends us a resolution-card for the desk. This has upon it a photograph of stacks of factory-chimneys, and letter-press which eulogises the virtue of commercial production as the joy of life. The card, which has a red border, is covered with gelatin, so that it will retain its freshness for the whole year.

MR. MAJOR HILL, chemist and druggist, 109 Norfolk Street, Wisbech, has again issued his annual, which maintains the high standard established through a long series of years. The contents consist of medical notes and a price-list in addition to the almanac. Mr. Hill's own preparations are prominently advertised, and insured persons are reminded that they have free choice of chemist. The cover, in colours and gold, gives a brilliant appearance to the annual.

ARMOUR & Co., LTD., Atlantic House, Holborn Viaduct, London, E.C., send us a copy of their Army and Navy Calendar for 1916. It consists of four cards, each 17 in. by 11 in., attached to cardboard mount, each card containing three months of the calendar. The feature of each of the cards is a picture, in colours, of a group of soldiers or sailors. The calendars are most attractive, and arrangements have been made to supply users of the Armour products with a copy on condition that a label or wrapper from one of the Armour specialities is sent, with sixpence to cover the cost of packing and posting. Without the label or wrapper referred to the charge for the calendar is 1*s*.

MR. FREDK. J. MUNRO, Halifax, N.S., representative in Canada for S. Maw, Son & Sons, issued a striking New Year card entitled "Canada in 1915," with the British flag and crown trophy in front. He says of the Dominion on the second page:

Canada in 1915

Has harvested the largest wheat-crop in her history.

Has established immense industries for the manufacture of war munitions, shells, machine-guns, etc., her factories working twenty-four hours a day.

Has participated in the councils of the Empire to an extent of greater import than ever before.

Has increased her exports.

Has a favourable balance of trade.

Has over-subscribed her first war loan.

Has the strongest banking position in her financial history.

Has earned a comparison with normal years in her bank clearings and railroad earnings.

Has an absence of strikes, making the labour situation good.

Has practised economy, individual, municipal, corporation, and government.

Has won high honours on the field of battle.

"And will continue until the end in the interests of the Mother Country."

The third page of the card bears a route-map from Sydney in the extreme East of the Dominion to Victoria in the West, this representing 3,919 miles of Maw's customers.

English and Welsh News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

The New Year's Honours List.

The Honours List, which was published on New Year's Day, contains the names of several medical men, one chemist and druggist, and several other persons indirectly connected with the drug-trade. The following receive Knighthoods:

Mr. Thomas Beecham, son of Sir Joseph Beecham, Bart., of St. Helens. He has won a reputation as a musical conductor and promoter of opera.

Mr. George Andreas Berry, M.B., LL.D., Past President of the Royal College of Surgeons, Edinburgh. He has specialised on the eye and published a treatise on diseases of the eye.

Mr. Thos. John Hughes, Chairman of the National Health Insurance Commission for Wales.

Mr. Thos. Wright Parkinson, M.D., an authority on cancer and tumour.

Mr. Milsom Rees, F.R.C.S., a laryngologist.

Mr. Richard A. Robinson, D.L., J.P., chemist and druggist, was Chairman of the London County Council in 1908-9, and during that year received the King and Queen (at that date Prince and Princess of Wales) on the occasion of the opening of the new tunnel under the Thames at Rotherhithe. Sir Richard has given much time and work

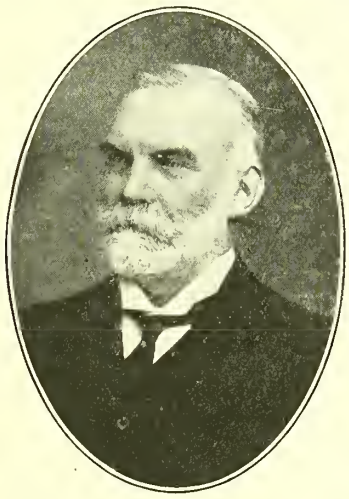


Photo Elliott & Fry, Ltd.
SIR R. A. ROBINSON, D.L., J.P.

to political and municipal affairs for many years past, and has been Vestryman, Poor-law Guardian, Churchwarden of St. Mary Abbot's, Kensington, member of the Thames Conservancy, and a Governor of the Imperial College of Science. He passed the Minor examination of the Pharmaceutical Society in 1872, and formerly carried on business as a chemist, as Malden & Co., in Brompton Road, London, S.W., and at Tunbridge Wells. The Brompton business was disposed of last June, and on December 31 his interest in the Tunbridge Wells business ceased. Steps are being taken to dispose of the third pharmacy which he owned in King Street, St. James's, S.W. Sir Richard was elected President of the Pharmaceutical Society in June 1905, and continued in office until January 9, 1907, when he resigned owing to the demands upon his time in connection with other public work. His family and relations have been settled at Whitby for many years, his great-grandfather being Comptroller of Customs at that port up to the time of his death in 1777. One of his sons, Captain Reginald W. Robinson, was killed in action at Gallipoli last August. Another son, Lieutenant R. A. Robinson, is a barrister, pharmaceutical chemist, and chief sanitary inspector for the Middlesex County Council.

Not Downhearted.

The Western Chemists' Association (London) is determined to give its members as pleasant a time as possible this winter in spite of dark nights and other things. On Wednesday evening next, January 12, a special whist-drive is to be held at the Restaurant Frascati, the proceeds to be given to the Pharmaceutical Benevolent Fund. Play will commence at 7.30, after a reception by the President and Mrs. A. R. Melhuish from 7 P.M., and the only interruption will be for supper on the balcony. Tickets may be obtained from the Hon. Social Secretary, Mr. Charles Brooks, 4 Northumberland Avenue, London, W.C., at 4*s.* 6*d.*

Contracts.

The following contracts and arrangements have been settled:

Chorley Town Council.—The Killgerm Co., for disinfectant.

Eastry Guardians.—Mr. A. E. Woodruff, chemist and druggist, chemists' sundries.

Gloucester Guardians.—Mr. W. Walwin, chemist and druggist, emergency chemist for three months.

Hull.—Metcalfe & Son, to supply drugs for six months, and J. Hindle & Co., to supply aërated waters for six months to the asylum; Mr. H. Leggott, drugs, six months; Sayers, Silcox & Co., surgical dressings, twelve months; and Mr. B. M. Stoakes, aërated waters, twelve months, to the Health Committee.

Lewes Guardians.—Mr. J. C. Lloyd, chemist and druggist, drugs, 27*l.* 12*s.* 5*d.*

Ludlow Guardians.—Mr. W. J. Brown, Ph.C., cod-liver oil, 2*s.* 3*d.* per lb.; emulsion, 1*s.* 6*d.*

Maidstone Guardians.—Mr. F. J. Oliver, chemist and druggist, drugs, 163*l.* 19*s.* 2*d.*

Nuneaton Guardians.—Boots, Ltd., chemists' goods; Mr. George Davison, dispensing.

Ormskirk Guardians.—Garsides, Ltd., drugs.

Prisons, etc.—Tuesday, January 4, was the last day that the Prison Commissioners, Home Office, Whitehall, London, S.W., received tenders for the supply of drugs and sundries to all prisons, State inebriate reformatories, and Borstal institutions in England and Wales.

Salford Town Council.—Burroughs Wellcome & Co., to supply serums, etc., to the Ladywell Sanatorium (approximately 228*l.* 7*s.* 2*d.*); Hough, Hoseason & Co., drugs and medical requisites. Both for a year.

Sedgefield Rural Council.—Bainbridge & Finlayson, Stockton-on-Tees, drugs.

Poor-Law Appointments.

The Hursley Guardians have increased the salary of Dr. J. L. Livingston 30*l.* per annum, in view of the increased cost of drugs.

The Guardians of the Leeds township have appointed Miss M. St. A. Stansfield dispenser at the infirmary. The Local Government Board has approved.

The General Purposes Committee of Greenwich Borough Council has increased the salary and emoluments of Mr. G. W. Vickery, dispenser at the Maze Hill Dispensary, from 80*l.* per annum, with rooms, firing, and lighting, to 100*l.*, and an additional 5*s.* per week for the employment of a person to keep the dispensary clean.

Birmingham.

A man committed suicide at Selly Oak (Birmingham) by jumping into a tank of dilute oil of vitriol, pneumonia supervening.

Sir Thomas Barclay was presiding Magistrate on December 31, when an important point concerning "drink on football grounds" was decided.

The list of Dont's published in the *C. & D.* January 1, p. 52, recalls one of a series which used to hang in a well-known local pharmacy, "Don't use your jaws as a cork-press."

Alderman F. C. Clayton, Ph.C., is the only living representative of the Freemen of the City of Birmingham on its Council. He seconded the resolution admitting Alderman Sir W. H. Bowater to the Roll of Freemen. This gentleman is a member of the dental profession, and has occupied the Mayoral Chair of the city five times.

Lieut.-Colonel J. T. M. Morrison, J.P., senior surgeon to the Birmingham Queen's Hospital, has given two lectures at the Midland Institute on his experiences in Serbia in hospital-work. The lectures were intensely interesting and the descriptions most graphic. In the course of his address, Colonel Morrison paid a grateful tribute to Sir Thomas Barclay for his personal interest in the expedition, and to the staff of Southall Bros. & Barclay, who fitted out the drugs and medical appliances under great pressure, working night and day and even one Sunday in order to have the goods despatched in time.

Liverpool.

The new closing order for chemists and druggists is much less drastic than was asked for, and some disappointment has been expressed on that account. At the same time, the order follows precedent, and in the view of many will meet most of the requirements.

The Liverpool Chemists' Association at a Council-meeting on Thursday, January 6, had to re-appoint (1) a member of the Juvenile Employment Bureau Committee of the Education Committee, a post in which Mr. T. Fell Abraham has given good service; (2) a member of the Advisory Committee under Lord Derby's recruiting scheme; and (3) a member of the Roll of Honour Week Committee, which is to make a "shop effort" on behalf of the Town Hall Fund for war widows and orphans.

Sheffield.

Although Mr. Bernard Lancaster, the Insurance Committee's checker, is progressing as well as can be expected, there is little prospect of his taking office under the joint-pricing bureau.

Bro. John Evans, F.I.C., Ph.C., joint city analyst, was advanced by Worshipful Brother Percy Carr and other pharmaceutical brethren a Mark Master Mason at the Mason Hall on Thursday evening.

Our correspondent, on inquiring at various pharmacies about business during the Christmas season, received such reports as "Not so bad," "Very good," and "We have had a record," with a little complaint from dealers in wines, etc.

Miscellaneous.

SEVENTY HULL CHEMISTS and allied traders out of ninety have voted in favour of an early-closing order under the Shops Act.

THE EAST LANCASHIRE BRANCH of the British Red Cross Society has received 8*l.* 14*s.* 5*d.* from the Manchester Pharmaceutical Association.

PAYMENT OF INCOME-TAX.—The Board of Inland Revenue has reported to the Treasury on a proposal to issue special stamps for the collection of the income-tax from weekly-wage earners.

LICENCES UNDER THE POISONS AND PHARMACY ACT, 1908, have been granted in Hull to W. Thomas, ironmonger, with D. Toyne & Sons, and to H. Dalby and W. Ewart James, with E. P. Dixon & Sons, Ltd.

MACCLESFIELD CHEMISTS AND DRUGGISTS are closing at 8 on Mondays, Tuesdays, and Thursdays; 1 on Wednesdays; 8.30 on Fridays; and 10 on Saturdays. Swinton chemists are closing half-an-hour earlier than formerly, except on Wednesdays and Fridays.

SHOP-LIGHTS TOO BRIGHT.—At Hull on January 4, Mr. Ashley Cluff, manager of Taylor's Drug-store, Carr Lane, Hull, was fined 10*s.* 6*d.*, under the restricted-lighting regulation order; and Mr. Herbert S. Richardson was fined two guineas for a similar offence at the premises of Boots, Ltd., King Edward Street, Hull.

LIMITED PARTNERSHIP.—Registered on January 3, Tom Laycock & Co., glass-bottle manufacturers, Holbeck Lane, Leeds. Partnership for three years from January 1, 1916. General partner: T. Laycock, Street Lane, Leeds, glass-bottle manufacturer. Limited partner: J. B. Gaasck, 24 Longue Rue d'Herenchals, Antwerp, now residing at 34 Westbourne Park Road, London, glass-bottle exporter, contributing 400*l.* in cash.

POISONINGS. The deaths from poisoning reported since our last issue were due to hydrocyanic acid, chlorodyne, belladonna, and potassium cyanide. The prussic acid was taken by Mr. A. C. Pye, chemist and druggist, Burton, while suffering from a nervous breakdown (*C. & D.*, January 1, p. 43). The chlorodyne was taken in overdose by an old lady at Norwich named Perry, who had suffered from insomnia. A Liverpool labourer took belladonna liniment which had been supplied to him to alleviate the pain of cancer. A school-boy at Marham, in a fit of temper, drank some solution of potassium cyanide which was kept in a greenhouse for the purpose of destroying wasps. The jury called attention to the risks of leaving about dangerous poisons such as this.

CHEMICAL-MAKERS' DINNER.—As some relaxation from the pressure of war work, and as a recognition of the loyalty of the staff, the directors of Thomas Morson & Son, Ltd., 14 Elm Street, Gray's Inn Road, London, W.C., entertained the staff to dinner in the Caledonian Salon, Holborn Restaurant, on January 1. Mr. T. Pierre Morson presided over a happy gathering. After dinner a concert was given and much appreciated. Considerable fun was caused by the circulation of the "Elm Street Hard Times," No. 1 of an illustrated newspaper produced by two members of the office staff, which consisted of facetious comments on various members of the staff. The contents-bill, the headlines printed in large type on yellow paper, was duly posted up in the room. This concluded with the apt recommendation, "Try Morson's Pepsine." The evening was brought to a close shortly after eleven o'clock with the singing of "Auld Lang Syne."

WESTMINSTER COLLEGE.—At the recent term examinations the following students were successful: Silver medals—(*Pharmacy*) Mr. H. L. Blake, (*Chemistry*) Mr. H. Limon, (*Botany*) Mr. A. E. Fox (*Materia Medica*) Mr. J. R. Smith, (*Dispensing*) Mr. W. H. Rawlings. Bronze medal in dispensing, Mr. A. E. Fox. The following certificates were awarded: *Pharmacy*—Messrs. P. C. Richards, Limon, B. Skou, O. S. Thomas, G. L. Coombes, A. E. Butterfield, H. Harker. *Botany*—Messrs. H. Limon, W. H. Rawlings, H. L. Blake, J. R. Smith. *Chemistry*—Messrs. P. C. Richards, H. Limon, B. Opie, W. H. Rawlings, H. L. Blake, W. W. Harrison, E. R. Jones, A. E. Butterfield, Jago, A. E. Fox, G. Harris. *Materia Medica*—Messrs. P. C. Richards, H. Limon, R. Sambridge, W. H. Rawlings, B. Skou, A. E. Fox, H. Harker, G. L. Coombes. *Dispensing*—Messrs. P. C. Richards, B. Opie, H. L. Blake, W. Tucknott, J. R. Smith, E. R. Jones, G. L. Coombes, A. E. Butterfield, A. E. Fox, G. Harris.

Scottish News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

Shop-hours and Wages

At the annual conference of the National Union of Shop Assistants, Warehousemen, and Clerks, held at Dunfermline on January 1, it was resolved (1) to inaugurate a campaign to limit labour in shops to forty-eight hours per week; (2) condemning overtime in wholesale establishments and to limit payment of overtime; (3) to secure new minimum rates of wages in Scotland consequent on increased cost of living; (4) to oppose conscription.

Edinburgh.

Mr. J. G. Sclater has succeeded Mr. J. G. Fraser as representative of Raimes, Clark & Co., Edinburgh, on the Scottish East Coast journey.

Mr. James Cooper, dentist, Edinburgh, who died a few days ago at the age of seventy-two, claimed to have been the first man to make and play with a rubber-cored golf-ball. While an apprentice dentist he made the ball with the aid of a dental vulcanising-machine.

The wife of a chemist and druggist tours the neighbouring country in a motor "pharmacy," trading with the villagers and doing good business. The lady drives the car, and the venture has become a complete success, incidentally benefiting rural districts which have no chemist.

Glasgow and the West.

The War Dressings Depôt has issued 37,000 bandages.

Mr. J. Shand, chemist and druggist, who has been with Cockburn & Co., Ltd., Rutherglen Road, has been appointed a dispenser in the Glasgow Royal Infirmary and has taken up his new duties.

Messrs. A. Macmillan and J. H. Murphy are the retiring directors of the Chemists' Friendly Society, and both offer themselves for re-election. The trustees and manager also fall to retire, and the board recommend their re-appointment.

An amusing suggestion has been printed in the "Evening News," December 29, that aërated-water manufacture should be stopped for the duration of the war, so that the lorrymen may be utilised to relieve the railway and dock congestion. The manufacturers, chemists and druggists, and other dealers are up in arms against the suggestion.

Stirling.

Saturday was held as New Year's holiday in Stirling, and was observed with drawn blinds by all the local chemists except two.

The Stirling Co-operative Drug Department windows look particularly well, being handsome large plate-glass. The goods are well displayed, but lack the essential "price-tickets."

Messrs. Duncanson, Hogg, and Walker have been elected by the Pharmaceutical Committee as their representatives on the Pharmaceutical Sub-Committee of Stirling Burgh Insurance Committee. Drs. McFayden, Vost, and McFarlane are the medical representatives.

ARGENTINE EXPORTS.—During the first ten months of 1915 the exports of linseed from the Argentine were 890,011 tons, an increase of 99,929 tons against the same period of 1914; 144,199 tons of quebracho-logs were shipped, against 263,968 tons; and 93,985 tons quebracho-extract, against 69,329 tons in 1914 (1 ton of quebracho-logs is worth $30 paper, f.o.b., and 1 ton of extract $180 to $190 gold). Germany was the principal market for quebracho, but since the war the United Kingdom has taken large quantities—*e.g.*, 40,000 bags extract arrived in Liverpool last week.

Italian News.

PROMOTING CHEMICAL INDUSTRY.—A Congress of Chemistry and Pharmacology has been held at Rome at the instance of Signor Cavascia, one of the Government Ministers. According to a report presented to the Minister by Signor Ciamician the Congress had under particular discussion the problems of the national production of medicinal chemicals, dyestuffs, and tanning-extracts, which problems, it is held, the national industry should be able to solve satisfactorily as there are no deficiencies in the home resources which would prevent the adoption of these scopes of activity. Among recent developments is the establishment at Genoa of the Stabilimenti di Rumianea Ing. A. Vitale, with a share capital of 100,000*l.*, to erect a soda-factory which will be the first of its kind in Italy.

THE ASPIRIN QUESTION.—The Italian newspapers claim that the native pharmaceutical firms have succeeded in manufacturing many products which were obtained from Germany prior to the war, and that new successes in this direction are frequently being realised. Some surprise, however, has just been caused by the issue of a circular at Milan, signed with a foreign name, offering to supply to pharmacists aspirin obviously of German origin, and giving a warning against similar products on the market which are declared to be adulterated or to be composed of sodium salicylate. The circular has aroused the anger of a Milan newspaper, which states that everyone will understand that this competition, based upon slandering Italian products and favouring a German article, is very inappropriate, and that none better than the pharmacists themselves are able to form an opinion as to whether aspirin is genuine, but that a generalisation could not be made, as is sought by the circular, against the whole of the Italian production. On the other hand, it is reported that an Italian chemist has been arrested for disposing of sulphate of magnesia as aspirin, and among the denunciations made against the supplies appear the names of pharmacists at Nice, Marseilles, San Remo, etc. The mention of Marseilles recalls the fact that the adulterations recently announced from France were asserted to have been traced to deliveries received from that port.

South African News.

(From "C. & D." Correspondents.)

"The Chemist and Druggist" is supplied weekly to members of all the Chemists' Societies in South Africa.

The Union.

OCTOBER IMPORTS of drugs, chemicals, and apothecaries' wares into the Union were valued at 108,127*l.*, against 73,835*l.* for October 1914; and for the ten months ended October 31, 1915, the imports were 899,895*l.*, against 717,876*l.* during the corresponding period of 1914. Medicinal preparations were imported in October to the value of 11,650*l.*, against 7,829*l.* in October 1914. Glycerin imports in October for manufacturing-purposes were 648,957 lb., against 600,933 lb. in 1914.

Cape Province.

PHARMACY BILL.—The Pharmaceutical Society met on December 15 to discuss the draft Pharmacy Bill, which, however, has not yet been made public. It is expected that the text of the Bill will be published soon in the "Gazette."

FAREWELL DINNER.—The staff of Heynes, Mathew, Ltd., gave a farewell social evening to Mr. H. S. Pollexfen, who is leaving after fourteen years as manager. The managing director, Mr. F. C. Mathew, who presided, made presentations to Mr. Pollexfen, who replied. Mr. H. J. Kinlay introduced to the meeting Mr. V. White, who is to take Mr. Pollexfen's place with Heynes, Mathew, Ltd.

"FORETHOUGHT is a virtue and a money-maker." How many thousands of chemists recognise that fact to-day, probably more so in the Colonies than in England? Never did you make a truer comment, writes our Cape Town correspondent. Not only would the buyers of twelve months ago have been able to meet competition, but in all probability would have made handsome profits. Even now, I should say, it would be well to buy stock, for it hardly seems possible or likely that prices will ease off for some months to come. Our next shortage out here will probably be patent and proprietary medicines, owing to the export prohibitions in force in England. Even when that prohibition extends for only two or three weeks in England, it makes an enormous difference out here, as shipments become dislocated, and consequently supplies are irregular. The S.A. Contingent for German East Africa is now practically up to full strength, and it will proceed to German East Africa early in January.

Australasian News.

"The Chemist and Druggist" is supplied weekly to all the members of eight Chemists' Societies in Australia and New Zealand.

Fiji.

THE SALE OF DRUGS ORDINANCE mentioned in the *C. & D.*, January 1, p. 40, has been referred to a Select Committee. The sale of medicines in Fiji is controlled by quite a series of Ordinances. No. 32 of 1877 includes Section 13, as follows:

"The Chief Medical Officer may, on the application of any holder of any store licence residing in the country (*i.e.*, not in Suva or Levuka), issue to the applicant permission to retail such articles as the Chief Medical Officer may think fit, and the permission aforesaid shall not in any case be for more than six months, but may be renewed. But except in cases when such permission shall have been granted no storekeeper shall sell any article of medicine of the kind and in the form that such article is ordinarily prepared for medicinal usage."

A previous Ordinance of 1876 provided for the registration of medical practitioners and apothecaries and pharmaceutists. This was repealed in 1881 by an Ordinance which provided for the keeping of a register of medical practitioners, apothecaries, and pharmaceutists, and also laid some restrictions upon the sale of poisonous medicines, as distinct from the medicines of the Ordinance of 1877. Ordinance No. 5 of 1892 repealed Sections 5 and 6 of the Ordinance of 1881, and provided that any prescription containing any of the poisons mentioned in that Ordinance shall be copied and the copy be available for inspection. Ordinance 23 of 1909 repealed Section 3 of Ordinance of 1881, and provided for the recognition of any accepted British or Colonial certificate as scheduled in 1913 and imposed a penalty on any pharmacist prescribing medicines or performing any surgical operation. No. 17 of 1910 again repeals Sections 5 and 6 of the 1881 Ordinance, which had already been repealed by No. 5 of 1892, and substitutes a poison Ordinance of fourteen sections. The various Ordinances clearly distinguish the sale of medicines from the sale of poisonous medicines. A Shops Closing Act is in force, giving chemists the right to open and conduct business apart from the restrictions on storekeepers, and the local chemist is satisfied that this gives him a right to sell any medicines whether they are poisons or prescriptions to be dispensed. The chemist's licence is not solely for dispensing medicines and selling poisons, but for the supply of any medicines or drugs.

New South Wales.

MR. C. J. CARROLL has resigned his position on the Pharmacy Board and the Pharmaceutical Society owing to ill-health.

LABELLING KOKO.—The Pharmacy Board on November 9 discussed the question whether the expression "cantharides" in the Poison Schedule includes cantharidin, and whether "koko" came within the definition of "preparation of cantharides." (See *C. & D.*, December 4, p. 54.) It was eventually decided to obtain the opinion on this matter of the law officers of the Crown

NATURALISED GERMANS.—The inquiry in Parliament concerning citizens of German origin did not overlook Mr. A. Forster, Registrar of the Pharmacy Board. In reply to questions in Parliament the Colonial Secretary stated that Mr. Forster was born in Hanover; he left there in 1873, and had since resided in British Possessions. He arrived in New South Wales in 1891, was naturalised on March 4, 1896. He married an Englishwoman, and his children are British-born and married to British subjects. None of his children or grandchildren understand any other language than English. Mr. Forster is paid by the Pharmacy Board out of its own revenues, and is therefore not employed in the public service.

Victoria.

WILLIAM WRIGLEY (JUNIOR) CO. PTY., LTD., has been registered with a capital of 10,000*l.*, in 1*l.* shares, to acquire from William Wrigley (Junior) Co., U.S.A., machinery and plant used in the manufacture of chewing-gums, etc.

German News.

FAT FROM SEWERS.—The special correspondent of the "Newcastle Daily Chronicle" writes about the extraction of fat from sewer-water, for which Berckhold, of Frankfort, has been awarded a gold medal. He has erected factories at Elberfeld and Frankfort for extracting the fat and transforming it into margarine. [It is more than a year ago since it was reported in the *C. & D.* that fat was being extracted from sewage in Germany.]

DR. GEORG GRÜBLER, the well-known physiological chemist, died in Jena on November 7. Originally Grübler studied pharmacy, but he soon devoted himself exclusively to physiological chemistry, and became known on account of his researches on albumen. In 1880 he founded a laboratory at Leipzig, where he devoted himself to physiological and bacteriological researches. His bacteriological stains became known all over the world. In 1897 Grübler removed to Dresden, intending to retire from his life-work; but he could not leave physiological chemistry alone, and in later years succeeded in obtaining pure trypsin, pepsin, and steapsin.

GERMAN INDEPENDENCE.—In an address to the Bremen Chamber of Commerce on December 28, Alfred Lohmann, the President, spoke about Germany's independence of imports, stating that the sea blockade had stimulated industrial activity. Saltpetre is now exclusively produced in Germany from the air, and by the spring there will be enough to satisfy even agricultural requirements, while if the war lasts longer the factories will be able to export nitrogen products made from the air. He also mentioned that camphor is now produced in Germany of better quality than natural camphor from Japan and the synthetic product made from oil of turpentine.

TWO JUBILEES are referred to in the German pharmaceutical papers. Fifty years ago A. Kékulé propounded the benzene theory, and devised the ring formula of benzol; and twenty-five years ago E. von Behring laid the base of serum-therapeutics. The first publication about the structure of benzene appeared in the French periodical the "Bulletin de la Société Chimique de Paris," January 27, 1865. A year afterwards (February 6, 1866) a more extensive publication on this subject appeared in "Liebig's Annalen der Chemie." G. Cohn, who writes on this subject in the "Pharmazeutische Zentralhalle" of December 16, refers to the Kékulé festival held in 1890, on which occasion representatives of all European countries were present to do honour to the discoverer of the theory which had such an immense influence upon the development of organic chemistry. E. von Behring published his first communications about serum-therapeutics in the "Deutsche Medizinische Wochenschrift," December 4, 1890. The public in general can better realise how much humanity is indebted to Von Behring for his experiments on natural and artificial immunisation than it can judge the merits of Kékulé's theory. Both of these discoveries, however, have been of the highest importance. [When Kékulé made his discovery he was a lecturer in chemistry at St. Bartholomew's Hospital, and the idea came to him when journeying home on a London 'bus.—EDITOR *C. & D.*]

PHARMACEUTICAL BUSINESS.—The "Berliner Tageblatt," reporting on the year 1915, states that although there had been an extensive and urgent demand for drugs during the whole year, and business in toilet preparations was also comparatively good, the German pharmaceutical industry has suffered considerable loss, as it was not possible to add the greatly increased cost of production to selling-prices, and because export business, which had been carried on at profitable prices, almost came to a standstill; even business with neutral countries also left much to be desired. Medicinal-plant crops were not unfavourable on the whole, but the high wages considerably increased the cost of harvesting, so that higher prices had to be reckoned with, while Italy, Russia, and North America did not send their usual supplies. Great hope was set upon the development of business in the Near East, especially as the East and the Balkan countries had always been good buyers of pharmaceutical and chemical products and drugs, and were also important sources of supply of medicinal plants. German materia medica was enriched during the year to an exceptionally great extent by the introduction of many new and good remedies, and there was a regular demand by pharmacists, although prices were dearer. All factories are very busy on orders for the allied Central Powers. "It is quite out of the question," adds the "Tageblatt," "that scarcity of any pharmaceutical products whatsoever can arise. We even have plentiful supplies of those products from the countries which are closed to us at present or not within easy reach."

SYNTHETIC RUBBER.—Professor Dr. Memmler, Berlin, is stated to have discovered a new method for the synthetic manufacture of rubber. Motor-tyres have, it is stated, already been made of this product, and are quite satisfactory. The "Vossische Zeitung" remarks with regard to this communication: Experiments for making synthetic caoutchouc were first made so long ago as forty years. Bouchardat in 1860 showed that the carbohydrate isoprene can, under special circumstances, be changed into a substance that resembles caoutchouc. In 1909 the Elberfeld chemist, Dr. Fritz Hoffmann, succeeded in obtaining from pure isoprene and other similar carbohydrates a colourless elastic product, which in its chemical properties resembles caoutchouc. The difficulty, however, was to obtain isoprene in large quantities. Dr. Hoffmann and his collaborator, Conselle, choosing coal-tar as the raw material for the preparation of pure isoprene, tried fifty methods, of which only one appeared to be of any practical use. Using paracresol as the raw material, the discoverers succeeded in obtaining, in March 1909, some litres of pure synthetic isoprene. The method they followed was rather complicated, however, and simpler methods of manufacture were sought for. In 1910 1 kilo. of pure isoprene cost 1,000m. to produce. At the same time experiments were made as to the best method for converting isoprene into caoutchouc. Harries showed that the presence of small quantities of metallic sodium during the heating of isoprene and similar carbohydrates made the rubber more resistant to chemical agents. Particulars about the new discovery by Hoffmann have not yet been published.

Austrian News.

METHYL-ALCOHOL POISONING.—Sixty-five persons have died in Hungary in consequence of drinking spirit containing methyl alcohol. Eighteen other persons are seriously ill at Budapest from the same cause.

SCARCITY OF COTTON-WOOL.—According to a decree of the Minister of the Home Department, the strictest economy must be practised in the use of cotton-wool. In all cases where possible cotton-wool should be substituted by cellulose, the raw material for which is obtainable in plenty.

WOMEN UNIVERSITY STUDENTS.—The women students of the Budapest University have sent a request to the Government asking for the equalisation of the conditions upon which men and women are admitted to the University. At present the admission of women depends on special permission obtained from the Minister of Instruction.

THE PRICE OF LARD.—Maximum wholesale prices for lard have been fixed by the Austrian Home Department at 721kr. per 100 kilos. in the period from December 16, 1915, to January 15, 1916, at 670kr. per 100 kilos. from January 16 to February 15, at 618kr. per 100 kilos. from February 16 to March 15, and at 567kr. beginning with March 16.

SIR WILLIAM RAMSAY, who on the occasion of a visit to Vienna was elected a corresponding member of the "Oesterreichischer Ingenieur und Architektenverein," has been removed from the list of corresponding members on account of his candid remarks on Germany and German science. Sir William Ramsay is still an honorary member of the "Deutsche Chemische Gesellschaft."

"PHARMACY AND THE WAR" is the title of a pamphlet containing a series of documents regarding the influence of the war upon pharmacy. It is illustrated with many photographs, letters, etc. The author is Dr. Hans Heger, the editor of the "Pharmaceutische Post" and Secretary of the "Oesterreichische Pharmazeutische Hilfsstelle." Dr. Heger intends to devote the profit from the sale of this booklet of more than 100 pages to the relief fund for the dependants of pharmacists in military service.

COMMANDEERING METALS FROM PHARMACIES.—With regard to the commandeering of metals in Austria, the "Allgemeine Oesterreichische Apotheker Verein" called the attention of the Government to the fact that many metal-apparatus used in pharmacies cannot be dispensed with. In answer to this request, the Central Commandeering Committee has replied that the measure does not include apparatus for distillation, percolation, and extraction, but is only applicable to metal mortars, in place of which porcelain mortars can be used, and metal pans, which can be replaced by vessels of enamelled iron.

New Companies
and Company News.

P.C. means Private Company and R.O. Registered Office.

HERA, LTD. (P.C.).—Capital 100*l*. Objects: To carry on business of manufacturers and sellers of obstetric belts and appliances, in particular such belts under patent No. 6,757 of 1915. The subscribers and first directors are Mrs. C. J. Howell and W. M. Howell, 12 Fisher Street, Swansea, barrister.

RICH THE CHEMIST, LTD. (P.C.).—Capital 3,000*l*. Objects: To carry on the business of chemists, druggists, and dispensers, etc., and to adopt an agreement between E. T. Rich and W. R. Jones. The subscribers and first directors are T. J. Templeman and E. T. Rich. R.O., 30 High Street, Swansea.

W. & J. GEORGE (LONDON), LTD. (P.C.).—Capital 12,000*l*. Objects: To carry on the business of scientific-instrument makers and dealers, general dealers in chemicals, etc., and to acquire the business carried on by W. and J. George, Ltd., at 17-27 Hatton Wall, E.C. The first directors are W. J. George and A. J. George.

OWENS DEVELOPMENT SYNDICATE, LTD. (P.C.).—Capital 10,000*l*. Objects: To carry on the business of manufacturers, importers, and exporters of and dealers in bottles, glass goods, etc. The first directors are G. E. Alexander, P. Gold, C. Kilner, and F. R. Dixon-Nuttall. R.O., 51 Lincoln's Inn Fields, London, W.C.

THOMAS SMITH & SON, LTD. (P.C.).—Capital 25,000*l*. Objects: To carry on the business of oil, colour, paint, white-lead, enamel, varnish, and chemical manufacturers, colour-grinders, painters and artists, chemists, druggists, drysalters, etc. The first directors are C. A. Harman (239 Whitechapel Road, E.), C. A. D. Harman, W. G. Ford, O. G. Harman, and G. Chalcraft.

OSBORNE, GARRETT & CO., LTD. (P.C.).—Capital 100,000*l*. Objects: To take over and carry on the business of hairdressers' sundriesmen, etc., carried on as Osborne, Garrett & Co. at 51-54 Frith Street, Soho, London, and at Birmingham, and to adopt an agreement with T. W. Garrett. The subscribers and first directors are T. W. Garrett (governing director) and W. H. Osborne and S. T. Garrett (managing directors).

TAYLORS' DRUG CO., LTD.—The twenty-eighth annual meeting of the shareholders of this company was held at the Hôtel Métropole, Leeds, on December 29, when it was reported that the profits in the year which ended on January 30, 1915, amounted to 14,020*l*. 6*s*. 2*d*., compared with 14,222*l*. 1*s*. in 1914, 10,959*l*. in 1913, 6,378*l*. in 1912, 9,296*l*. in 1911, and 6,419*l*. in 1910. It was agreed to pay a dividend of 8 per cent. on the ordinary shares, to place 6,894*l*. 8*s*. 5*d*. to reserve, and carry forward 5,523*l*. 11*s*. 10*d*. Mr. Armitage, the retiring director, was re-elected.

Westminster Wisdom.

By the "C. & D." Parliamentary Representative.

REASSEMBLING OF PARLIAMENT.

Both branches of the Legislature reassembled on Tuesday, and on the following day the Prime Minister introduced his much-anticipated Military Service (No. 2) Bill, which was debated with much vigour on that day and Thursday. Sir John Simon has resigned the Home Secretaryship.

THE BAYER CO., LTD.

Sir John Lonsdale put a question to the President of the Board of Trade on January 6 regarding this company. He asks if the President is aware that this company has a capital of 100,000*l*., consisting of 10,000 shares of 10*l*. each, of which 9,912 shares are held by Farbenfabriken vorm. Fr. Bayer & Co., and of the six remaining shareholders four are resident in Germany, only twenty-four of the 10,000 shares being held in this country; if the operations of this company are under control; if this company signed a contract three months after the war commenced for the erection of new warehouses and offices in Manchester, for the sum of 33,845*l*. and, after holding back the contractors for two months, they are now pushing on with the building; and if it is intended to allow this German owned and controlled company to use British labour, which is needed for national purposes, to provide themselves with facilities for competing with British firms after the war is over.—Mr. Runciman, in reply, said that the facts are as stated. He added that he appointed a superviser on December 14, 1914. Before the war the company accepted a tender for the erection of new warehouses in Manchester for 33,845*l*., and after the acceptance of the tender the company wished to postpone building, but the contractor issued a writ to compel them to proceed. The contract for the building was signed on November 2, and a payment made to the contractor in respect of the increased cost of the materials arising through the delay. The contractor does not now wish to proceed with the contract, but the company wish to have the building completed, as they are under notice to leave the premises now occupied by them. He would consider whether the case was one in which it is desirable that steps should be taken to prevent the completion of the contract.

Sir John Lonsdale: Are you aware that the German undertaking controlling this firm is now using all its energies for the manufacture of poison gas and high-explosives in Germany?

Mr. Runciman: I do not know that they are.

Sir John Lonsdale: They are.

Gazette.

Partnership Dissolved.

MASSINGHAM, J. P., and HORNER, W. E. L., Wolstanton, Stafford, physicians and surgeons, under the style of Massingham & Horner.

Bankruptcy Acts.

ADJUDICATIONS.

BRUNSDEN, R. L., 268 Oxford Road, Reading, chemist and druggist.

SYMES, E., Abbotswood, Cinderford, Gloucester, and lately at The Hermitage, Box, Wilts, surgeon and medical practitioner.

WHITMARSH, R. P. H., 37 Walbrook, London, surgeon.

Royal Tradesmen.

The "London Gazette" of January 4 contains twenty-eight pages of the names of Warrant holders to the King and other members of the Royal Family.

Bankruptcy Report.

Re Edward Theodore Ainley, chemist and druggist, Woolhall Street, Bury St. Edmunds.—The public examination of this debtor was held on December 31 at Bury St. Edmunds last week. The debtor's statement of affairs was mentioned in the *C. & D.*, December 18, p. 45. The deficiency is 120*l*. 18*s*. 2*d*. Debtor attributed his insolvency to difficulty in obtaining and greatly increased price of packages and ingredients which he could not charge to his customers. He stated he had been in business in Bury for nineteen years, and was first in the employment of Mr. Floyd, from whom he bought the business and took a Mr. Childs as partner. He put about 500*l*. of his wife's into the business, the joint capital of himself and partner being 2,000*l*. The time came when his partner disposed of his share, and a Mr. Bentley took his place. They formed the business into a company, which afterwards went into liquidation, but the creditors were paid in full. From the liquidator he purchased the goodwill of the business, having been helped by friends with money to the extent of about 400*l*. None of the money was repaid. The great part of his business was in preparations. He had not kept recently any books which showed money taken or paid away. The examination was adjourned.

Business Changes.

Authenticated notes are inserted without charge if not in the nature of advertisement, and subject to Editorial approval.

CAVE & HIGGIN, LTD., have removed to 265 Deansgate, Manchester, their telephone number being Central 1283.

MR. J. ELSWORTH ALCOCK, Ph.C., late of Broomhill Pharmacy, Sheffield, has purchased the old-established business of the late Mr. A. G. Green, pharmacist, 69 Churchfield Road, Acton, W.

F. W. BOWYER & BARTLEET, produce-brokers, 147 and 148½ Fenchurch Street, London, E.C., announce that the procuration of their firm has been granted to Mr. Harold E. Annison, who has taken an active part in the business for some time.

Births.

Authenticated notices are inserted without charge.

LAWSON.—At 49 Melton Road, West Bridgford, Nottingham, on December 26, the wife of John Lawson, of a son.

MCBRIDE.—At 58 Malden Road, New Malden, Surrey, on January 3, the wife of R. Best McBride, pharmacist, of a daughter.

MACDONALD.—At Baronscourt, Renfrew, on December 31, the wife of Robert Macdonald, pharmacist, of a daughter.

STRANACK.—At Corneville, Musgrave Road, Durban, Natal, on January 3, the wife of Morris William Stranack (Stranack & Williams, chemists and druggists), of a daughter. (By cable.)

THOMPSON.—At 2 Thorburn Road, Colinton, on January 2, the wife of Thomas W. Forster Thompson, chemist and druggist, of a daughter.

Marriages.

Authenticated notices are inserted without charge.

COOPER—BRINSON.—At the Parish Church, Chesterfield, on January 1, Bernard Cooper, chemist and druggist, manager of Eardley & Furnival's Broomhill branch, Sheffield, to Ruby, second daughter of Mr. William Brinson (Evans Sons Lescher & Webb, Ltd.), The Laurels, Chesterfield.

CRAN—GALASHAN.—At the Caledonian Church, Holloway Road, London, N., on December 25, William S. Cran, chemist and druggist, Edinburgh, to Mary A. Godfrey, elder daughter of Mr. John Galashan, London.

EDEN—ARMSTRONG.—At the Wesleyan Church, Workington, on December 29, Tom Eden, chemist and druggist, to Annie, second daughter of Mr. Joseph Armstrong, Holme Farm, Clifton, Workington.

EDGE—TURTLE.—At All Saints' Church, Lincoln, on December 27, Ernest, only son of Mr. and Mrs. Edge, Iscoyd, Whitchurch, Salop, to Elizabeth Harriett, only daughter of Mr. C. H. Turtle, 1 Ellesmere Avenue, Lincoln.

MEYSTRE—BARNES.—At Wolborough Parish Church, on December 27, Andre Edouard, second son of Mr. Denis Meystre, of Lausanne, Switzerland, to Janet Mary, only daughter of Mr. G. A. Barnes, chemist and druggist, 14 Courtenay Street, Newton Abbot.

SPRIGINGS—LEAR.—At Stanfield Church, Burslem, on December 23, Walter T. Sprigings, chemist and druggist, Liscard, to Gladys, youngest daughter of Mr. W. Lear, Oakville Avenue, Burslem.

WILLSON—REED.—At St. Andrew's Church, Whitehall Park, Highgate, London, N., on December 27, 1915, H. B. Willson, Ph.C., St. Thomas's Hospital, to Ruby Evelyn, eldest daughter of Mr. and Mrs. A. H. Reed, 22 Bismarck Road, Highgate.

Deaths.

Authenticated notices are inserted without charge.

HENSHAW.—At Peel Villa, Mountfields, Shrewsbury, on December 24, Emily Gertrude, wife of Mr. J. Langley Henshaw, pharmacist and optician, Shrewsbury, aged thirty-one.

LESLIE.—At Aberdeen, on January 2, Mr. Robert Leslie, Ph.C., 627 George Street and 66 Sunnybank Road, Aberdeen, aged forty-three. Mr. Leslie was born in Fifeshire, but as a youth went to Aberdeen and served his apprenticeship with Mr. William Reid, chemist and druggist, Holburn, Aberdeen, where the excellent training he received enabled him to pass the Minor examination in October 1893, just when he came of age. Two years later he passed the Major examination. At that time he was taking an active interest in the Aberdeen Junior Chemists' Association, of which he became President. Subsequently he purchased the pharmacy at 627 George Street, Aberdeen, then Dr. Innes', and six years later opened the branch at 66 Sunnybank Road. He had been in poor health nearly all last year, and is survived by a widow and two children.

OLIVER.—At Riversleigh, Farnham, Surrey, on December 27, Mr. George Oliver, M.D., aged seventy-four. Dr. Oliver, in conjunction with Professor Sir Edward Schäfer, discovered the functions of the suprarenal bodies. He was the author of various works on blood-pressure and clinical subjects, and was a contributor to the "Journal of Physiology" and other journals on the physiology of the ductless glands and the circulation. In 1894 he was appointed the first Oliver-Sharpey lecturer, a chair which he himself founded, at the Royal College of Physicians, in memory of his old teacher, Professor Sharpey. He formerly lived at Harrogate.

SHIELDS.—At 294 West Princes Street, Glasgow, on December 28, Mr. Thomas Shields, of Thomas Shields & Co., Ltd., chemists and druggists, Dundas Street, Glasgow, aged sixty-one.

WEDDLE.—At 89 Liscard Road, Liscard, on December 31, Mr. William Gardner Weddle, chemist and druggist, aged thirty-seven. Some time after pasing the Minor examination in 1904 Mr. Weddle commenced business at the above address, and was much respected in the district.

Killed in Action.

SIM.—Killed by a shell in France, on December 24, Mr. George Sim, chemist and druggist, aged twenty-nine. Mr. Sim was a son of Treasurer Sim, North Berwick, and was educated at the High School in that town. He was apprenticed in 1902 to Provost Macintyre, of North Berwick, and after the expiration of his term of apprenticeship remained as assistant for another year. He passed the Minor examination in September 1908, and shortly afterwards obtained a position with Allen & Hanburys, Ltd. In February 1913 he joined the London staff of Burroughs Wellcome & Co., and relinquished this in September 1914 in order to join the Empire Battalion of the Royal Fusiliers. He was a man of bright and genial disposition, and was much esteemed by all his colleagues.

PRIVATE G. SIM.

THOMPSON.—Lieutenant Albert Martin Thompson, of the 14th Royal Fusiliers, younger son of the late Mr. Albert Thompson, for many years general manager of Boots, Ltd., Nottingham, was killed in action in France on December 20-21. During the night his company ("D") was engaged in a severe conflict with the enemy, and early in the attack, he was wounded in the leg; but disregarding this hurt he fought on and had actually reached the parapet of a German trench when he was fatally hit by a bullet. Lieutenant Thompson held a responsible position with Boots, Ltd., until he enlisted at the beginning of the war, and he was gazetted to a commission in the City Royal Fusiliers (London) on December 18, 1914. He was held in the highest esteem by his colleagues at Boots, and was a well-known athlete. He was also highly respected by his men and greatly loved by his brother officers. His elder brother, Mr. W. A. Thompson, chemist and druggist (also of Boots' staff), is a lieutenant in the Robin Hoods.

WHITE.—Private Clifford Oakes White, Horbury, aged twenty-eight, who is reported to have been killed in action, was employed at Taylor's Drug Stores, Wakefield, before enlisting in September 1914.

WILLOX.—In France, on December 19, from shell-fire, Private John Charles Willox, of the 1st Gordons, aged twenty-two. Mr. Willox was a native of Portknockie, Banff, and served his apprenticeship in that district, passing the Minor examination in April 1914.

Died on Active Service.

PENROSE.—Private Samuel Penrose, of the 1-5th West Yorkshire Regiment, who before his enlistment was with Raimes & Co., wholesale druggists, York, has died in France from the effects of gas-poisoning.

GRENADA SPICES.—A Colonial Office report on the trade of Grenada (Windward Islands) for 1914 states that the cultivation of spices is confined almost entirely to nutmegs, with its derivative mace. The cultivation of nutmegs is not increasing, and has remained stationary for many years owing to the decline in prices. Mace has of late years commanded a relatively favourable price, and has had the effect of making nutmegs a profitable crop. Although the area devoted to cultivation has not been extended, the output of the island has steadily increased during the past ten years, and has just doubled during the decade. This is due to the fact that the crop of a nutmeg-tree tends to increase steadily with its age. The produce for the season covering the report was 1,372,900 lb., while four years ago it was 909,300 lb.

Personalities.

Authenticated notes are inserted without charge if not in the nature of advertisement, and subject to Editorial approval.

MISS MULLETT has been engaged by the Camberwell Board of Guardians in place of Miss Coste as dispenser at Nunhead (during the latter's absence on war service), at a remuneration of two guineas a week.

MR. E. S. GRENNAN, who is on the travelling staff of Petersen, Ltd., manufacturing chemists, Johannesburg, has recently arrived in this country, along with his wife and their child, and expects to be here for some time. At present he is residing in the neighbourhood of Blackburn.

ON Thursday evening, December 16, a few pharmacist friends of Mr. C. F. Carr, of FitzHugh & Carr, chemists, Nottingham, entertained him at the Welbeck Hotel, as he is leaving the city to join his Majesty's Forces. Mr. Carr was presented with a case of pipes and a drinking-cup with the united good wishes of those present.

THE late Daniel Yates, chemist and druggist, Oswaldtwistle, Lancs, left estate of the gross value of 20,992*l.*, of which 6,642*l.* is net personalty. Probate of his will, dated December 10, 1913, has been granted to his widow, Mrs. Mary Yates, of Sunny Bank, and his sons, Mr. Joseph Green Yates and Mr. John Yates, chemists and druggists.

Ancient and Modern Medicines.

TEMPTED no doubt by the recent bicentenary celebration, a representative of "The Observer" interviewed Mr. Frederick J. Hanbury, vice-chairman of Allen & Hanburys, Ltd., on New Year's Day, with the following result, which we cull from our contemporary's issue of January 2:

There is to-day (said Mr. Hanbury) an enormously larger number of drugs in use than there was two hundred years ago; and, of course, a great many of the old-fashioned drugs that were found in the earlier Pharmacopœias have entirely gone out of use. Practically all the modern drugs of the synthetic type, like antipyrin and aspirin, are of German origin, the manufacture of which is being taken up in this country by ourselves and others. The tendency in their use has been to drive out some of the old-fashioned drugs. Many of these new drugs, however, are little more than a passing phase, and practitioners, after trying them, often partially revert to the older remedies.

MR. CORNELIUS HANBURY, M.R.C.S. (1849), L.S.A. (1850), M.P.S.

Twenty or thirty years ago, if we had been asked what articles were in most demand, we should have said sarsaparilla and cod-liver oil. The vogue of the latter remains, but sarsaparilla is now comparatively little used. In the early part of the last century the sale of leeches was one of the most important. Doctors bled their patients for every imaginable ailment. To-day all that we can say of leeches is that we just keep them. They are chiefly used now, when they are used at all, for local inflammations, principally of the eye. One of the drugs that has been popular throughout the centuries is castor oil. It is as useful to-day as it was two hundred years ago. [Here Mr. Hanbury quoted Joseph Gurney Bevan's statement about castor oil in 1777, as given in the *C. & D.*, December 25, p. 53.]

One of the greatest changes in the past two hundred years is that in prescriptions. Formerly it was the custom for a huge list of ingredients to be given, whereas to-day the prescription is comparatively simple and very often no more than a line. The change in prices is also remarkable. Two hundred years ago apothecaries' bills were very high. I have seen one of these old bills in which three boluses in one day were charged four-and-six each. These high prices are explained by the fact that many of the old apothecaries acted as prescribers as well as dispensers, and their fee included both advice and medicine. The apothecaries were finally confirmed in the right to prescribe as well as dispense; but at a later period the sale of drugs came into the hands of the pharmacists, who dispensed and prepared them only, but did not prescribe.

"The Observer" then deals with the history of the firm, and mentions those who have been at its head. In this connection it is mentioned that "one of the drugs that Daniel Hanbury investigated was agar-agar, now mentioned for the first time in the new Post Office Directory. He traced it to its true botanical source as a Japanese seaweed, besides describing it more fully than it had been described before. It used to be called Japanese isinglass. Of late years, Mr. Hanbury said, it has come into very considerable use as an aperient, its action being entirely mechanical." Reference is also made in the article to the venerable head of the business, Mr. Cornelius Hanbury, whose portrait we give above.

Trade Notes.

COCKLE'S PILLS.—The revised prices of Cockle's pills are announced in the advertisement in this issue of James Cockle & Co., 4 Great Ormond Street, London, W.C.

SHEEP-DIPS AND DISINFECTANTS.—Morris Little & Son, Ltd., Doncaster, refer in their advertisement to the various sheep-dips and disinfectants which the company manufacture.

BOTTLES. Jules Lang & Son, Charlton Works, Charlton Place, Islington, London, N., give a list of bottles and druggists' sundries which have arrived and are offered for sale, subject to being unsold.

PERRIER WATER in cases is from January 1 increased in price both to wholesale and private buyers. Perrier, Ltd., 45-47 Wigmore Street, London, W., will send full information to retail buyers who apply to them by postcard.

PLASMON.—During the whole of this month Plasmon, Ltd., Farringdon Street, London, E.C., are giving retailers a bonus of 5 per cent. on the Plasmon preparation. Full particulars are given in an advertisement in this issue.

BRITISH-MADE CHEMICALS.—The English Drug and Chemical Works, Ltd., Ravenscroft Works, Scrubbs Lane, London, N.W., publish a list of some of the chemicals which they manufacture. These include certain fine chemicals hitherto manufactured abroad.

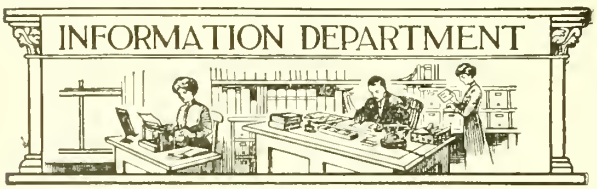
TEA-TABLETS.—Ayrton, Saunders & Co., Ltd., 34 Hanover Street, Liverpool, have had such an unexpected demand for their tea-tablets that they had difficulty in keeping pace with it. They inform us that they have overtaken this, and can now supply the tablets from stock.

"ICY-HOT" VACUUM FLASKS.—Henry C. Quelch & Co., Ludgate Square, Ludgate Hill, London, E.C., have sent us one of the new showcards which have been issued for the purpose of advertising the "Icy-hot" vacuum flasks. There is a topical picture by Bruce Bairnsfather on the showcard which will attract attention. The card measures 15½ by 10½ in., and is printed in red and sepia.

STAFFORD ALLEN & SONS, LTD., manufacturing chemists, essential-oil distillers, etc., Cowper Street, London, E.C., inform us that in their advertisement on the front cover of the *C. & D.*, January 1, dealing with pure selected lemon oil "Allen's," the words "manufactured by" were used by inadvertence. Although they are manufacturers of oil of cloves and many other essential oils, Allen's lemon oil is not, of course, manufactured by them, but is imported, and is of such purity that the name "Allen's" is applied to it.

GOLD PAINT.—J. Davies & Co., 43 Basinghall Street, London, E.C., advertise in this issue the "Glossolar" gold paint, which is British made and supersedes any of the foreign-made gold paints which have been offered on the English market. The same firm are proprietors of the "Stancglas" window-transparencies which are used for obscuring windows and giving the effect of stained glass. Bronze powders are also a speciality of the firm. Aluminium powder and gold, silver, and metal leaf are also stocked in great variety.

FOR THE LONG NIGHTS a most entertaining and readable book is Wootton's "Chronicles of Pharmacy." The two volumes, published at a guinea, are sent post free by the *C. & D.* for 7*s.* 6*d.*



Postal Address:
C. & D. INFORMATION DEPARTMENT, 42 Cannon Street, London, E.C.
Telegraphic Address: "CHEMICUS, CANNON, LONDON" (two words).
Telephone Number: 3617 CENTRAL (three lines).

INFORMATION WANTED.

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated. Please address us as above:

152/34. Ingram's water-glass.
83/72. "Pimy" balsam.
83/72. "Ko-Yana Tooth paste."
84/51. Hexamine, crude, in strong solution, actual makers.
85/41. Milk-sterilising apparatus on the Soxhlet principle.
85/62. Pitt's pacifiers, No. 450
85/62. "Camilo" tooth-brushes.
84/66. "Klitol."
85/64. "Carmala ointment and bark."
87/29. "Aries" anti-vermin body-belt.
87/29. Pachard's bunion comfort.
83/47. Hilton's hygienic label-damper (reg. No. 11409).
88/54. Cotogen tablets, No. 1 and No. 2.
87/47. Prepared Sphagnum moss: actual makers.
88/59. Parma Lotion and Speciality Co.: address.
88/56. Hyalin.

INFORMATION SUPPLIED.

Inquiries regarding the following articles have been answered. The information as to supply will be given to others who send a stamped, addressed envelope to the Information Department, THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.:

Castile soap, 85/63 and 87/20
Chloride of lime, 86/37
"Formidin," 87/19
Horsford's acid phosphate, 83/9
Iron jelloids, 85/62
"Levasco," 84/67
Nickel sulphate, 81/56
Paris green, 86/720
Resorcin, 83/1
"Typhoo Tips" tea, 85/25
"Undine" eye-droppers, 81/9
Valentine's meat-juice, 85/623

Dog and Cat Poisoning.

By Cornelius Bayley, Uppingham (illustrated by Felix C. Bayley).

"PLEASE, Mr. Blank, will you poison this dog, as he's bitten a piece out of the dustman's leg, and mistress is afraid he'll go mad?"—dog or dustman not stated. Such an order frequently strikes terror in the breast of the mild pharmacist, and only the greater fear of offending a good customer, coupled with the desire to earn half a crown prevents him from telling the page-boy to go to the deuce and take the dog with him. One of the funniest episodes in my career centres round a poisoning incident (but in this case it was a cat, not a dog). It was in the days of my apprenticeship. The governor, a good old sort as ever lived, who wouldn't hurt a fly, received an instruction from one of the best clients we had to destroy the cat painlessly, and as speedily as possible. Poor pussy, a black Persian tom, was brought by the gardener in a small hamper, and was uttering most plaintive mews. I knew the governor hated the job, and to my query whether I should get him the poison-spoon—a pewter instrument with a lid, marked with indentations of the teeth of previous victims—he replied, "Why couldn't they drown the —— cat?" However, the client (our local vicar) could not be offended. The half-crown, too, must not be missed, so I was told to get the poison-spoon and the prussic acid, and be quick about it. I needed no second telling; truth was, I was excited and anxious to see the execution. So the spoon and the poison being got handy, the gardener was told to bring the cat round at the back of the return-counter. To the question, "Can you hold the cat?" the gardener promptly replied, "Yus, I can howd it." So the gardener was seated on the small steps, with the cat between his knees, the poison was poured with a shaking hand into the spoon, and to the governor's instructions to hold him tight, and the gardener's assurance, "I've got him," a hurried and tremulous attempt was made to get the prussic acid into pussy's mouth; but no sooner did the spoon touch his lips than "Phit, phit," his talons set to work in the gardener's hands and wrists. He dropped the cat, who had only got the barest dose of the lethal fluid, and who immediately tore up behind the counter towards the window. Progress being stopped here, up the shelves he went, bringing down first the zinc-ointment jar, then the laudanum-bottle, next the cayenne-pepper bottle, then dropping backwards among the ruins in his final death-struggle. The poor old governor stood aghast, then he anathematised the cat to all eternity, solemnly asseverating he'd never undertake to poison either cat or dog again as long as he lived.

"Will you please poison this dog?"

As can be imagined, such an incident for some time afterwards caused me to view the poisoning of animals with alarm, and it was not until I was in a situation in the Black Country, where the master had a great reputation in the canine world, that my confidence was restored; and I received proper and explicit instructions how to administer prussic acid to animals so that the effect should be as rapid as possible and all fear of accidents be prevented. Firstly, I was told not to be frightened at the job. Secondly, never to poison a cat or dog in the shop, but always in the back yard; thirdly, always to secure a cat in a bag, to avoid scratches. Since then I've poisoned hundreds of cats and dogs, and incidentally have earned a reputation for knowing how to do it properly and humanely. I never use anything except a two-drachm measure and perfectly fresh Scheele's acid; the operation is complete in a few seconds.

"The dog will open its mouth."

How to Administer the Poison in case of a Dog: Don't fuss or pat him; take hold of the collar with the left hand, press the lip of the measure to the side of the mouth, and pour the contents between the teeth. You may let the dog go at once then; he will not stir more than a few feet before the poison will take effect, doggie will roll over, and, with a brief struggle, be dead.

With Pussy, more precaution must be observed; but in this case all fuss and nervousness should be avoided. It is the simplest matter to get a handy seed-bag, pop the cat's body and legs in, so as to protect the operator from pussy's claws. Leave the head out of the sack, and, holding her round neck with the left hand, press the lips of the cat with the measure, when it will be found she will open her mouth, and the poison can be poured in. It is now a simple matter to drop the head through into the bag, and with a few kicks it is all over, and pussy is ready for interment.

"Pussy an easy victim."

These are the results of my own experience in a busy practice, and I trust they may prove of service to other members of the craft who have hitherto approached this duty with trepidation and fear. I would impress upon them the advantage of the two-drachm measure over other appliances, such as covered spoons or syringes, which invariably lead to bungling over the job, whereas a plain measure answers all the purpose, is handy, available, and effective.

Observations and Reflections.

By Xrayser II.

The "C. & D. Diary" for 1916

shows no obvious shrinkage in size, but ranges with its forerunners on the shelf quite harmoniously. This of itself is no slight achievement at a time when everything in life seems to have shrunk a little. As regards its contents it compares favourably with the rest, and I notice one or two new features which give it a distinctive value; the article on Fine Chemicals is one of these which is worthy of special mention. The Encyclopædia Pharmacologia is a miracle of arrangement and condensation, and I do not know where else to find so quickly and certainly any information that may be needed on points of law affecting pharmacy. As one of its sub-heads reminds us, "Experience does it," but Experience is a forgetful jade, whose lessons need recording and codifying. You have done this admirably. One word of criticism I have to offer, but it has respect to a matter for which I am sure you are not responsible. There are some noticeable gaps in the information given on pages 179 to 182. You complained last year that you had been unable to get particulars repeatedly asked for from the officials of Local Associations, and I presume that your present inability to give the membership of many Associations is due to the same cause.

The Advertisements

are, however, the most reassuring feature of the "Diary," the most convincing proof that we are neither down-hearted nor slack under the disappointments and delays of the war. We had hoped that, if not over, its end would be well in sight during 1915, but it still drags on. The strain on our energies and resources is greater than ever, but we are going on in our accustomed way as strongly and confidently as ever, or, rather, we are in many respects showing a resourcefulness, an inventiveness, an adaptability with which we have never been credited. Determined, dogged, yes! John Bull has always had that character, but he has scarcely even claimed to possess the qualities he is now showing, and which are shown nowhere in business more strikingly than in your advertisement columns. We were even more seriously handicapped at the beginning of the war in the chemical-trade than in the field of battle, but here, as there, the balance is shifting. Mr. Runciman says, indeed, as you remind us, that in business Germany is already beaten; let us hope so. At all events, this "Diary" of yours is no small asset on our side when we compare books with her.

Getting Back to Gentian,

calumba, broom, and chamomile is what we might have expected in these days of famine in synthetic drugs, but whether the return will be permanent is doubtful. Mr. F. J. Hanbury said the other day to an "Observer" representative that sarsaparilla was one of the most popular drugs twenty years ago, and while I would myself have said forty years rather than twenty, there can be no doubt that its disuse has been caused quite as much by the displacement by synthetics as by the notion, fostered by pharmacologists, that the drug is quite useless for any medical purpose. Does it follow that all our old drugs, good and bad, are going to be rehabilitated? I doubt it. The younger race of medical men know little of the virtue of gentian and calumba and their kind, and our materia medica text-books will have again to be taken in hand before we get back to Nature. Some of our old friends will never be displaced, such as cinchona, opium, ipecacuanha, and rhubarb, and our old inorganics, like calomel, bismuth, and bromide, will survive when

Hexamine, Phenacetin, and their Tribe

have been forgotten. The great aim of the physiological synthesist, to coin a word, has been to provide palliatives for symptoms instead of cures for diseases. Some day our medical authorities will wake up to the fact that this is an inversion of the natural order, and that it is infinitely better to remove the causes that produce headache than to administer synthetics to remove the symptom by the dangerous expedient of reducing the blood-pressure. It seems to me that medicine will soon be tending altogether in another direction, and that the search will be made in animal products for many of the panaceas that hitherto we have failed to find either in organic, inorganic, or synthetic drugs. Thirty years ago the fame of thyroid led to an indiscriminate rush to animal organs, with quite insignificant results, the opotherapies being little better than quackeries. But the quackery of yesterday is the orthodoxy of to-morrow, and the marvellous history of adrenalin, which made bloodless surgery possible, and of pituitrin, which, with scopolamine, has robbed childbirth of its horrors, have turned men's thoughts to the active principles of these glandular substances, and more will be heard of them in future.

Science

is concisely defined as systematised knowledge, and knowledge, says Tennyson, is "of things we see." The tendency in England has, I believe, of late been to restrict the term science as Debove, in opposition to Berthelot, restricts it—that is, to the natural and physical, "the phenomena of the material universe and their laws." The restriction is convenient, but it seems philosophically unsound. Knowledge is not exclusively of things we see, and the definition given above shows that it is not. We do not see, but only infer, the laws by which science tells us phenomena are governed, by which indeed observation shows that they are governed. In all phenomena, too, we infer something we do not actually see. Phenomena are particular objects observable by the senses, but our knowledge of them is never of the mere particular. We perceive every object as an object in space, and therefore as related to every other object. But we do not perceive space as a whole, though we think of it as a whole, and cannot think of it in any other way. It follows that, as Watson says, in our simplest knowledge we are dealing not with particulars, but with particulars gathered together in a unity—a unity which we do not see, but the thought of which we cannot escape. The world of phenomena, in short, is only explicable by the world of thought, and science, to be worthy of the name, must take account of both. And who shall say how far the world of thought extends? Certainly it extends far beyond mathematics.

The Oxyrhynchus Papyrus, No. 1381,

in the volume I referred to recently, contains a document that is specially interesting in connection with what Mr. Aguizy tells us of pharmacy in Egypt at the present day. It is a text in honour of a deity, known to the Romans as Imouthes, who is the Egyptian Imhotep, identified by the Greeks with Asclepius, the god of medicine. What gives particular interest to this is the fact that Imhotep, unlike many Egyptian deities, is a real historical person, who seems to have been famous as a sage, a physician, and an architect. He is believed to have lived in the time of King Zoser, of the Third Dynasty. The precise date of this dynasty is a matter of dispute, but it ended about 3730 before Christ, having then lasted for some 200 years, and with it monumental history properly begins. The worship of Imhotep as a god is said to be older than the Fourth Dynasty, and to have been instituted by Menkaura (Mycerinus), the builder of the third Gizeh pyramid. The papyrus, which is believed to date from the first or second century of our era, recounts how the writer, having begun the translation into Greek of an Egyptian work in honour of Imhotep (Asclepius), laid it aside for some time, when, by the intervention of the god, his mother was cured of a quartan ague and himself of a pain in the side accompanied by a terrible fever. In gratitude votive offerings and sacrifices were made to Imhotep, but through the priest these were rejected and the completion of the translation demanded in their stead.

New Terms of Supply

NOTICE IS HEREBY GIVEN that new terms of supply to the Trade are now in force in respect of all Retail

Preparations, and the Retail Prices are their face values.

Details will be sent on application.

THE "SANITAS" CO., Ltd., Limehouse, LONDON, E.

December 1915.

HYPOSULPHITE OF SODA (Pea Crystals)
GLAUBER SALTS (Pea Crystals)
EPSOM SALTS (Clean and Dry)
FLOWERS OF SULPHUR
FULLER'S EARTH (specially Fine Quality)
TOILET OATMEAL (Very Fine). Etc. etc.

For Special Terms apply to

G. S. MUMFORD & SONS,
Farringdon Road, London, E.C.

BRITISH
ABSOLUTE ALCOHOL.
Jas. Burrough Ltd. Dr. Gale Distillery, Hutton Rd., LAMBETH, S.E.

"A revolution in the art of Urine Testing."—*Medical Press & Circular.*

ENDOLYTIC TUBES

"The Laboratory in the Waistcoat Pocket."

Wholesale Terms on application to the Sole Proprietors:
FLETCHER, FLETCHER & Co., Ltd., HOLLOWAY, LONDON, N.

Editorial Articles.

Insurance Dispensing:

Proposed Additional Discount.

WE print on p. 49 further particulars in regard to the arrangements for pricing Insurance prescriptions in England this year. It is proposed to establish thirteen bureaus in England at an estimated cost of 1,400*l.* each per annum—say, 20,000*l.* Each bureau is expected to price two million prescriptions annually. We are not convinced that this can be done, but we lack details, as the Commissioners have not furnished them; therefore criticism must be reserved. It is denied that the proposed system is like the Scottish bureau, but we expect that there will be some resemblance in the manner that prescriptions will have to be sent in, but on this and other points official instructions will be issued shortly. Some hard things have been said about the staffing of the bureaus, and it is significant that the Pharmaceutical Society proposes to establish a department to check the work of the pricing bureaus. For this the Society's rate of payment is to be 16*s.* 8*d.* per 1,000, or 21,500*l.* for the 26,000,000 that the pricing bureaus are calculated to deal with annually. In this connection it is interesting to note Article 8 of the amended Medical Benefit Regulations, respecting payment to persons supplying drugs or appliances, which is as follows:

(1) For the purpose of ascertaining the amounts payable to persons supplying drugs or appliances (other than practitioners to whom capitation-fees are paid in respect of the supply of drugs and appliances) the Committee shall calculate, in accordance with the method contained in the agreements of such persons with the Committee for the time being in force, the amount payable to each such person in respect of the drugs and appliances supplied by him, and shall credit to him the amount so payable, or, if any sum has been allotted by the Committee to defray the administrative expenses of the Pharmaceutical Committee, shall, in the case of persons supplying drugs and appliances other than practitioners, credit that amount *less a rateable proportion of the sum so allotted*, provided that the Committee shall, if the Pharmaceutical Committee or the person supplying drugs or appliances concerned so requires, submit to that Committee or person all or any of the forms on which the drugs or appliances were ordered, together with particulars of the amounts calculated to be payable in respect of such drugs and appliances, and if the Pharmaceutical Committee or person take objection thereto, the Committee shall take such objection into consideration.

(2) As soon as may be after the receipt of each statement of account from a person supplying drugs or appliances the Committee shall pay to the person furnishing the account such sum as may be agreed between the Committee and the Pharmaceutical Committee in advance of the amount to be credited to him, and shall pay the balance of the amount so credited on or before dates appointed for the purpose by the Commissioners.

Section 33 of the 1913 Act enables Insurance Committees to pay Pharmaceutical Committees from the Drug Fund up to ½*d.* per insured person. Acting on the Pharmaceutical Society's instructions, Pharmaceutical Committees are now applying for administrative expenses, two-fifths of which would pay for the checking, which means 53,750*l.* in all, or about half as much as Sir Robert Morant estimated would be saved by the new Tariff by deduction from chemists' accounts. It will be seen from the italicised words in the new Article above quoted that *administrative expenses are henceforth to be deducted from chemists' accounts.* It was a brilliant idea for the Society to intervene at such a juncture in order to ensure that some of the 53,750*l.* in its passage from chemists' pockets to the Treasury should drop into Bloomsbury Square; but we wonder how Mr. Roberts and the Insurance Commissioners will interpret the comparative meekness with which English chemists as a body acquiesce in this further discount off their accounts!

Looking Forward.

THE question of the position of the chemical-industry after the war was referred to last week (*C. & D.*, January 1, p. 50) in connection with Mr. Runciman's announcement of the steps being taken by the Government to safeguard national commercial interests against German aggression. Sir William Ramsay makes the

useful suggestion in "Nature" that the many new works which have been erected for the purpose of manufacturing chemicals required for the war could be utilised after the war for the manufacture of chemicals required to make this country independent of Germany. These factories are equipped with modern plant, and many pieces of chemical apparatus, such as tanks, steam-coils, towers, stills, filter-presses, and the like, are ready to hand. It would be disastrous, writes Sir William, if after the war all the staffs are dismissed, all plant scrapped and sold, and the whole organisation broken up. He suggests that the Committee on Industrial Research should take up as the most pressing "research" the inquiry as to the best way of protecting our industries from German attack after the war is over. Another suggestion of considerable importance is that the chemical-manufacturers of the country should be asked to co-operate for the benefit of all. It is obvious that many of the chemicals which are being made in this country for the first time would be better produced on a large scale at one factory than in small quantities in several laboratories. Before the war, as is well known, there existed mutual distrust and jealousies between the units of various industries. The chemical-industry was no exception to this. It is nevertheless advisable that some steps should be taken to bring chemical-manufacturers together so as to form a powerful influence against future German aggression, and we believe the war will have made such a movement quite within the range of possibilities, however impossible it appeared before the war. We suggest that a beginning might be made by establishing a Chemical Defence Committee, the membership to be open to all British makers of chemicals. One has only to look at the abuse of the British patent and trade-mark laws by Germans to realise what an important field of defence is ready to hand. A good many patents taken out by Germans embody old albeit forgotten methods of manufacture which must be accepted by our Patent Office if the processes are not included in patent-specifications during the previous fifty years. The question of the continuation of registered names for chemicals after the patents for the manufacture of the chemicals have expired is also one which urgently requires looking into. The law is clear on this point, but individual manufacturers who have found out the injustice of allowing the abuse to continue are unwilling to incur heavy law expenses in vindicating public rights. This Committee could be enlarged in scope after its utility had been demonstrated. It could take charge of co-operative movements for making chemicals requiring centralisation and arrange for the manufacture of chemicals which have not been taken up owing to certain difficulties. As an example may be mentioned the manufacture of chloral hydrate, which we believe is not yet being made in this country. The difficulties in this case are that abundant supplies of chlorine are needed, and that our fiscal laws require special conditions in regard to the use of pure alcohol in manufactures. The supply of chlorine could be arranged in or near factories making hydrochloric acid, and the arrangements for the use of duty-free alcohol could be carried out in a co-operative factory where could also be made other chemicals in which ethyl alcohol is a necessity. The most perfect co-operation exists between the German chemical-manufacturers. Arrangements are made that a particular factory, owing to its suitability or the nearness of the source of raw materials, should take up the manufacture of a certain chemical, and such manufacturer is given the monopoly of the production within the German Empire. Moreover, when any discovery bearing upon the method of production of that particular chemical is made in any of the research laboratories of the other chemical-manufacturers, the information is communicated to the one particularly interested. The idea is to make the German manufacturer stand solid before the world. Something of the same kind could be carried out in the United Kingdom, but it requires a sinking of the spirit of mutual jealousy. If some drastic reform is not carried out, the difficulties of withstanding German commercial aggression will be increasingly felt, and the British fine-chemical industry may sink to the level of middlemen for German manufacturers.

Sir Richard Robinson.

THERE is, we feel sure, general gratification throughout British pharmacy in consequence of the King's recognition of the public work of Richard Atkinson Robinson by the honour of a knighthood. He is the first pharmacist who has presided over the Pharmaceutical Society of Great Britain to be so honoured, and although that fact is unconnected with the Royal appreciation, pharmacists know that the years which he snatched out of his public work for the service of pharmacy sufficed to make better known to them the personal attributes and administrative experience which marked him out for preferment. The Pharmacy Acts, 1852 and 1868, barred him from early participation in the work of the Pharmaceutical Council, because the Acts and by-laws excluded from membership chemists and druggists who were so by examination, although they admitted chemists and druggists who had passed no examination. Nevertheless, Sir Richard identified himself with the Society's interests, as well as those of the British Pharmaceutical Conference, while he was serving the Borough of Kensington and the London County Council in municipal and metropolitan affairs. (He also served Tunbridge Wells, where he had business interests, in a similar manner.) For many years it had been felt within the Pharmaceutical Society that it would be strengthened by admission into the Council of examined chemists and druggists. Mr. Carteighe, while President, frequently advocated this reform, but he tacked a curriculum on to the Bills in which he embodied it. Mr. Walter Hills, his successor in the presidency, had the good fortune to cast overboard the pharmaceutical Jonah which the curriculum had proved to be, and on December 1, 1897, submitted a Bill to the Council, the chief provision in which was the power to elect registered chemists and druggists as members of the Society, thus making them eligible to be members of the Council. This Bill was duly introduced into Parliament, which it passed with merely verbal amendment, and received Queen Victoria's sanction on July 25, 1898, as the Pharmacy Acts Amendment Act, 1898. By this time the influence of Mr. Robinson had begun to be felt within the Society. His position on the London County Council, of which he became Deputy Chairman, brought him into contact with members of the Government and departmental officers, thus he was able to appreciate the non-pharmaceutical view of the breach between the Privy Council and Pharmaceutical Society which had existed for nearly forty years, consequent on the Society's failure to fulfil an honourable understanding in regard to legalising poison regulations (see the *C. & D. Diary*, 1916, p. 346). Sir Richard was the first private member of the Society who had the courage to take practical steps to make

good in this matter, and it was in consequence of notice given by him that a special general meeting of the Society was called on January 11, 1899, at which the regulations were adopted by the Society, and twenty days later they were approved by the Privy Council, whereby they obtained statutory force. On March 5, 1902, Sir Richard was elected to fill the vacancy on the Pharmaceutical Council caused by the death of William Martindale, the President (Mr. Walter Hills) confining his remarks at the time to the new Councillor's three outstanding qualifications for the position : (1) he is exceedingly loyal to the Society, (2) has exceptional powers of debate, and (3) an intimate personal acquaintance with many official persons. In that same year (November 26) the Proprietary Articles Trade Association called a convention of manufacturers, retailers, and wholesalers of proprietaries to consider questions related to cutting the prices of these. Mr. Robinson, as he then was, presided at the Convention, and his conduct in the chair was a revelation to those who knew not his competence in this regard, the business being done in the most expeditious and thorough manner, while "the Convention magnificently demonstrated that the drug-trade of Great Britain is, when the pinch comes, a united body." In June 1904 he was appointed to succeed Mr. S. R. Atkins as President of the Pharmaceutical Society, and he did the duties of the office well, becoming exceedingly popular throughout the country. In October 1906 he was elected Chairman of the Moderate party of the London County Council. An election was pending, and all Mr. Robinson's time had to be devoted to this work, so he retired from the Society's presidency on January 9, 1907, and threw himself heart and soul into the contest, and after a fight of unprecedented bitterness, the Moderate party, for the first time in the history of the County Council, obtained a majority which they have since retained. In this connection it is interesting to note that Mr. R. A. Robinson, Junr., acted as his father's private secretary. Subsequently the leader of the Moderate party was elected the Chairman of the County Council, and he is still an active member of it, as well as of other public bodies; indeed, for some time past he has been relieving himself of his business connections so as to have more time to devote to public offices. The honour which now comes to him finds him one of the most active public men in London, and as the honour came through a Prime Minister differing from him in politics, it goes without saying that it is well deserved. "Perfect as a President, Powerful as a debater, and Popular whether he was dealing with Peers, Parliament, or Provincial Associations," is the alliterative eulogy written of him by the late A. C. Wootton, and seldom have a man's chief characteristics been so pithily expressed; withal Sir Richard Robinson is a warm-hearted man, with generous sympathies, who has the most human of all faculties—that of making friends who are as loyal to him as he is to them. During the past week he has received hundreds of letters of congratulation, and we know that he values none more than those he has received from his fellow pharmacists. May he and Lady Robinson live long to enjoy their new dignity!

Our Diary.

The Chemist and Druggist Diary, 1916, is out of print, so that we are unable to supply extra copies of it to subscribers or others. This early exhaustion of the exceptionally large edition is an index to the well-sustained popularity of THE CHEMIST AND DRUGGIST.

Naval Hospital Dispenserships.

NEW regulations concerning the appointment of Naval dispenserships under the Admiralty have been drafted, but we understand that they have not been officially promulgated, although they have been approved. It is difficult to say when the new regulations will come into force. One of the proposed alterations abolishes the title "dispenser," substituting that of "pharmacist," which is a step in the right direction seeing that "dispenserships" are held by registered chemists and druggists or pharmaceutical chemists. It is also proposed to divide the pharmacists into three classes, with a superintending pharmacist at the head. The pay, which commences at 110*l.* per annum, is also to be slightly increased. Since the war began the Admiralty have been inundated with applications for these posts, but there are only nineteen berths, and any vacancies that have occurred have been dealt with locally.

Produce from the East.

THE use of the Cape route to and from the Far East by the Nippon and other large steamship lines, in preference to the Suez Canal, is likely to prove detrimental to Mediterranean ports like Marseilles, Genoa, Leghorn, Naples, etc., as those were the principal shipping points for much French and Italian produce which was brought to London by the large liners especially adapted for cargo-service. Consequently, there is little hope of relief in the prevailing scarcity. Apart from the all-round advance in freights, war-risk insurance alone means an additional 5 per cent. on prices, while goods from the Far East will be a fortnight longer on the water. These conditions are, we consider, temporary; nevertheless, they have the effect of appreciating the value of spot stocks of Chinese, Japanese, Javanese, Indian, and Straits produce generally, as it makes the prospects of arrivals at due date uncertain.

Topsy-turvy System.

SOME reorganisation of the Royal Army Medical Corps is needful, according to the "Daily Express," which, besides mentioning the shortage of medical men and the possibility of getting hundreds who are "wasting their time in rural and seaside districts," refers to the misuse of men who are qualified to do special work. A correspondent states that he knows of a Bachelor of Science who is a private in a sanitation company and is under a non-commissioned officer who is an ex-lift attendant. There are some more extraordinary things than this in the pharmaceutical department of the R.A.M.C. For example, a baker is at present in charge of a squad of men who have to do with the packing of medicines and surgical requisites for despatch to the fighting line. He has some pharmacists under him! There are scores of pharmacists throughout the corps at home who are specially qualified to do any work connected with medicines and surgical requirements, but are not called upon to help, although it is exactly such services as theirs that the Army needs. Instead of being detailed to do such special work they are eating their hearts out in doing things that men without pharmaceutical qualification are quite as well fitted to do. These pharmacists ought to be detailed for duties in which their pharmaceutical skill and knowledge would make for efficiency, expedition, and ultimate safety of the fighting forces.

Inland Revenue Report.

THE fifty-eighth report of the Commissioners of Inland Revenue, for the year ended March 31, 1915, has been issued this week. This deals with the receipts of the

Inland Revenue and of other duties collected by the Department, which together amount to the gross total of 116,874,587*l*. This amount is analysed in a series of tables and the destination of the net sum stated. There is nothing in the report of direct interest to the drug-trade, but some items of general interest may be referred to. In the matter of estate-duty the gross capital of which the Department had notice during the year ended March 31 as passing at death was 344,499,584*l*., and the net amount, after deducting debts, etc., was 307,284,039*l*. As to the value of the 75,739 estates, the greater number (16,354) came within the class of exceeding 1,000*l*. to 5,000*l*., those exceeding 500*l*. but not exceeding 1,000*l*. being 12,302. Eight estates were over a million pounds, one of these being over three millions. In regard to inhabited-house duty, it appears that in Great Britain there were, in the year 1913-14, 306,213 residential shops charged to inhabited-house duty out of a total of over two million premises chargeable. There are also premises exempt from the duty owing to insufficient value or to their employment solely for business-purposes. A study of the figures shows a comparatively small but steady decline in the number of premises for the last three years under review. For some years the number of residential shops in the Metropolis has been declining, as also has the value. In 1911-12 the annual value of these premises was 4,259,774*l*., while in 1913-14 it was 3,972,334*l*., but, on the other hand, the number of premises exempt as being used solely for trade increased. The last-named exemption is, however, not strictly comparable with residential shops, as it includes all kinds of works, such as engineering-works, breweries, chemical-works, and warehouses. The lock-up shops would form, roughly, about a third of the total number of exempt trade premises. The figures for the income-tax are interesting, particularly those in Schedule D, which includes profits from businesses, concerns, professions, and employments (except those of a public nature, which are included in Schedule E). Of the number of assessments in the United Kingdom (742,707), 621,185 were of persons, 57,822 of firms, and 50,466 of public companies. The gross amount of income was over 670 millions, of which, roughly, 152 millions was personal income, and 349 millions that of public companies. In the year 1913-14, 13,231 persons were assessed to super-tax, against 12,531 in the previous year. The greater number (8,388) had incomes exceeding 5,000*l*. and not exceeding 10,000*l*. Seventy-five people had incomes exceeding 100,000*l*.

Who Said This ?

We have selected from famous authors things that they have said which pertain directly or indirectly to pharmacy or medicine. We propose to print these week by week, and we ask our subscribers to say who the authors were. The quotation printed last week was:

"Take the instant way. . . .
For emulation hath a thousand sons
That one by one pursue."

This week's quotation is:

"The end of physic is our body's health."

Tell us on a postcard who said this, giving your name and address. We shall award a copy of Wootton's "Chronicles of Pharmacy," in two volumes, or of "Pharmaceutical Formulas," to the *C. & D.* subscriber or his assistant who correctly gives us the names of the authors of the quotations which we publish in our issues this month, including the Winter Issue, January 29.

Replies received later than ten days after the quotation is published will not have priority of choice when we come to adjudicate the prize-winner.

Insurance Act Dispensing.

A Record of matters concerning Chemists' interests in the National Health Insurance Acts.

Reports from Local Centres.

With special reference to the supply of medicines and appliances.

ENGLAND.

Prescription-pricing Arrangements.

We place on record the recommendations which were made at a Conference on prescription-pricing held in Darlington on December 12, which was attended by representatives of Insurance Committees of the counties of Northumberland, Cumberland, Westmorland, Durham, and Yorkshire (North and East Ridings), and the boroughs of Sunderland, Middlesbrough, York, Carlisle, Gateshead, Tynemouth, Newcastle, South Shields, West Hartlepool, and Hull. The Conference agreed upon the following articles, which have the approval of the Commissioners; in fact, they are typical of the conditions which are being applied to all areas in England at the instigation of the Commissioners:

1. The Joint Committee shall consist of thirty-two members, two of whom are to be appointed annually by each Insurance Committee.
2. The Joint Committee will carry out the duties of the several Insurance Committees in connection with the pricing of prescriptions.
3. The Joint Committee may appoint an Executive Sub-Committee of not less than nine.
4. The Joint Committee may, at the request and cost of the Panel Committee, undertake investigations regarding excessive prescribing.
5. The expenses of the Joint Committee will be defrayed by the Insurance Committees in proportion to the number of prescriptions dealt with.
6. Disputes are to be referred to the Insurance Commissioners.
7. An Insurance Committee may determine the agreement at the end of any year by giving three calendar months' notice.
8. The Joint Committee, subject to the consent of the Commissioners, have power to appoint and pay a secretary and other necessary staff; in connection with this the Conference agreed, after much discussion, that the head of the establishment should be a qualified pharmacist, who should also act as secretary to the Joint Committee at a total salary of 200*l*. per annum; that there should be a chief accounting clerk at a salary of 160*l*. per annum, and that the other technical staff would approximately cost 676*l*. per annum; that the cost of the clerical and other office expenses would be 300*l*.; the initial expenses being spread over a period of five years.

On the basis of 2,000,000 prescriptions, this would mean an approximate cost of 13*s*. 9*d*. per 1,000 prescriptions.

The HULL INSURANCE COMMITTEE has fallen in with the scheme, although at present it gets the work done for 10*s*. per 1,000 prescriptions, or 120*l*. a year. The Pharmaceutical Committee pleaded for the retention of the present arrangement, experience during the past three years having shown that it had been carried out in a most efficient and careful manner, the local knowledge of the checker proving most helpful. The new method, said the Committee, offers many disadvantages without compensating benefits.—At the meeting of the West Riding Insurance Committee at Wakefield on December 30, the proposed central pricing bureau was discussed, and it was agreed to join the group on the condition that the Joint Committee should have proportional representation—the West Riding Committee to elect five representatives, Leeds three, Bradford two, and Wakefield and Dewsbury one each—and that the West Riding Committee be satisfied that the existing staff be considered.—The Bolton Insurance Committee decided on December 30 to join the prescription-pricing group of North-Western areas (*C. & D.*, December 25, p. 56) with headquarters at Bolton. It was reported that the present cost of checking is 9*s*. per 1,000, exclusive of establishment-expenses; the estimated cost of pricing and checking is 12*s*. 6*d*. exclusive, or 15*s*. 6*d*. inclusive, of establishment-expenses; the estimate under the Commissioners' scheme is 14*s*. per 1,000, "minimum statistical data" being included in these figures.—The Burnley Committee also agreed on December 29 to do the same.—The Halifax Insurance Committee decided on December 29 to join the North-East Midland group.—The Isle of Wight Committee is joining the South-Eastern group, on condition that the Committee-meetings are held in London. In the discussion on the matter, Dr. Walker complained that double pricing is necessary. Other members grumbled about the cost of the scheme.—The Staffordshire Insurance Committee on January 1 agreed to join the Midland group, with the bureau at Birmingham. So has the Herefordshire Insurance Committee.—The Plymouth Insurance

Committee on December 31 agreed to join the South-Western group, a proposal that the Commissioners should themselves establish the checking bureau and be responsible for its convening being lost. See also Exeter and Sheffield, below. The Portsmouth Insurance Committee unanimously decided on December 30 to hold aloof from the group for the South-Western or the South-Eastern Division of England. Alderman Sir Scott Foster presided at the meeting, and the decision was unanimous. [See article on p. 49.]

Bradford.—At the meeting of the Insurance Committee on December 29, it was reported that the number of insured persons in the area had decreased by 1,601 to 130,968 from July 1 to October 1. During the third quarter of the year chemists and druggists on the panel dispensed 69,013 prescriptions at a cost of 2,343*l.* 18*s.* 9*d.* The Finance Sub-Committee recommended payment of 90 per cent.—viz., 2,109*l.* 1*s.* 11*d.* As to emergency settlements, the Commissioners have made no grant for 1913, as the deficit was less than 15 per cent., but 926*l.* 12*s.* 5*d.* had been granted for 1914, which will reduce the discount on the chemists' accounts for 1914 to 15 per cent. The accounts amounted to 13,943*l.* 4*s.* 10*d.*, and the grant brings the payment up to 11,855*l.* 0*s.* 2*d.*, from 10,929*l.* 7*s.* 9*d.* already paid. The new scheme for pricing prescriptions having been reported on, Councillor H. T. Pullan was appointed to represent the Committee on the Joint Board. The resignation of Mr. H. R. Jackson (Harrison, Parkinson & Co.) as checker of prescriptions was accepted, and he was thanked for valuable services. It was reported that Bradford is the only area within the West Riding where "Rep. mist" prescriptions are allowed. The Panel Committee objects to total abolition of such prescriptions, but agrees to limit them to one month from the date of the original prescription, and it was agreed to allow repeat prescriptions if written within one calendar month of the original. Statistics for 1916 in regard to panel doctors (102) and insured persons (114,935, less 18,079 with the Forces) show an average of 1,127 per panel doctor, or 927 allowing for twenty-two doctors absent on service with the Forces. There are also sixty chemists, representing seventy-six shops, compared with fifty-nine and seventy-five in 1915.—At the meeting on January 4, the result of the appeal to the Commissioners by a Bradford doctor and his partner who had been surcharged by the Committee for alleged excessive ordering of drugs during the year ending January 11, 1914, was submitted. The Commissioners find that there had been extravagant prescribing, and that the surcharge of 15*l.* by the Committee had been justified by the facts. The appellant failed to substantiate his assertion that the Panel Committee's conclusion, that the prescriptions exceeded reasonable cost, rested solely on evidence afforded by a statistical comparison of the average cost of their prescriptions with that of all the local doctors. The appeal was dismissed.

Burnley.—The Insurance Committee learnt at the meeting on December 29 that the chemists' list for 1916 is the same as before—twenty-nine on it. It was agreed to ask the Panel Committee to accept a flat rate of 1*s.* per annum for every 100 insured persons on doctors' lists in respect of drugs and appliances supplied under the Emergency Regulation.

Cockermouth.—The following is the wording of an advertisement which appeared in the "Cockermouth Free Press" on December 31:

> We, the undersigned Chemists of Cockermouth, beg to acquaint our Customers—Patients under the National Health Insurance—that we have resigned from the Panel and therefore terminate our Agreements with the Cumberland Insurance Committee on Friday, December 31, for the Dispensing of Medicines and the Supply of Surgical Appliances. The reason for tendering our resignations is: that we consider the remuneration inadequate (Drugs at cost with small Dispensing Fee) for our services as qualified Dispensers and for the Drugs which we are in the habit of using in the Dispensing of Insurance and other Prescriptions.—J. W. W. Allison, J. T. Griffin, R. F. Brown.

Thus all the chemists in the town have resigned. The Cumberland Insurance Committee offered the dispensing to the local doctors, three of whom accepted, but the fourth doctor shares the views of the chemists, and will have nothing whatever to do with the supply of medicines, etc., which was offered *per capita* or on same terms as the chemists. This placed the Insurance Committee in a fix, as the fourth doctor informed them that there was nothing in his agreement to compel him to dispense for insured patients. To get over this difficulty the Insurance Committee have got Mr. Townley, Keswick, to take on the dispensing of this doctor, who is expected to hand his patients a stamped addressed envelope with his prescription, to be posted on to Mr. Townley. The Insurance Committee supplies the stamped envelopes, but who pays the return postage and the telephone in urgent cases, or what this arrangement for bottles is, has not transpired.

East Anglia.—Progress has been made in regard to the pricing of prescriptions in this area, to which reference was made in the *C. & D.*, January 1, p. 56. We understand that the Insurance Commissioners have taken premises next door to those of the Essex Insurance Committee at Leytonstone for the pricing bureau, and preparations will be made to accommodate therein the Essex Committee's checking staff, whose work, it is expected, will comprise the pricing of Essex prescriptions and those for the rest of East Anglia under a Conjoint Committee.

Exeter.—The Finance Sub-Committee reported at the meeting of the Insurance Committee on January 4 that, in their opinion, the Commissioners' prescription-pricing scheme offers no advantages over the method in vogue, and recommended the Commissioners be notified of their desire to continue the present arrangements. Mr. Munro (Chairman of the Sub-Committee), in moving the adoption of this report, said the Committee had done their work cheaply and efficiently, and he did not think there should be a change. Nobody could argue that the Committee were paying the chemists too much; in fact, it was not practicable to do it cheaper. In seconding an amendment that the recommendation be deleted, a member said he understood Mr. P. F. Rowsell was in favour of the scheme; but the Chairman said he thought Mr. Rowsell had bowed to the inevitable. The amendment was defeated by ten votes to seven. Some members then left, and another amendment, to the effect that the Committee consent to join the scheme, was carried, nine voting for and six against. Mr. Munro asked to have his name removed as a member of the Committee. After such a decision he should not attend meetings, and added that, as far as he was concerned, he was not going to waste his time in this sort of business.

Herefordshire.—Speaking at the Insurance Committee meeting on December 28, the Chairman (Alderman E. F. Bulmer) said the number of chemists on the panel for 1915 was thirty-three. Two had resigned—viz., Mr. V. W. Meacham, Ledbury, and Mr. John Slade, Tenbury—leaving thirty-one as at January 1, 1916. Chemists had been paid 80 per cent. of their accounts for the third quarter of 1915. The Chairman added that he went to London and interviewed the Commissioners regarding the chemists' new Tariff. He was not successful in getting anything satisfactory done, but the chemists had taken a patriotic view of present conditions—at all events until the end of the war. He thought the fact that they decided not to embarrass the Government or the Committee by holding out for better terms did great credit to their patriotism. It was agreed to join the Birmingham prescription-pricing bureau.

Kent.—"The Observer" (a local newspaper) refers to the pharmaceutical dissatisfaction reported in the *C. & D.* last week, stating that the pharmacists of Bexley, Bexley Heath, and Crayford absolutely refuse to work under the amended terms, thus following the lead set by the pharmacists of Scotland, as well as many nearer home at Bromley, Sidcup, Sevenoaks, and other towns. Our contemporary gives some general particulars about the dissatisfaction, and concludes with the remark that "The Kent Insurance Committee, who have power to modify the terms in certain particulars, have proved obdurate, with the result that at twelve o'clock on Friday night the pharmacists of the places named leave the National Insurance panel, and after that hour cannot accept prescriptions under the Act."

Lancaster.—As the result of representations from the Lancashire Insurance Committee to the effect that the dispensing service for Lancaster would not be sufficient unless the north and south ends of the town, as well as the centre, were represented on the panel, Mr. W. R. Aked, South Road, and Cuthberts, Ltd., North Road, have withdrawn their resignations from the panel. The other chemists on the panel are Boots, Ltd., Penny Street. Mr. J. B. Shattock, Secretary of the Pharmacists' Association, characterises as childish the rumours that the reason why chemists have withdrawn from the panel is that they have enough work with "munitioners." These workmen are insured persons he explains. The real reason why Lancaster chemists have come off the panel is that the remuneration is inadequate.

Leeds.—The Clerk to the Insurance Committee has issued to panel doctors and chemists a circular containing recommendations approved by a conference of representa-

tives of the Committee of the Panel Committee and of the Pharmaceutical Committee. They are as follows:

DRESSINGS, ETC., SUPPLIED IN BULK TO PRACTITIONERS FOR USE IN CASE OF EMERGENCY.—The total cost to the Insurance Committee shall not exceed 1*l.* per annum for each practitioner in respect of each 1,000 insured persons upon his list, subject to 33⅓ per cent. profit on cost.

FOODS, PATENT MEDICINES, ETC., including the following, are outside the provisions of Medical Benefit, shall not be prescribed by panel practitioners, and if supplied by pharmacists to insured persons payment therefor shall be disallowed by the Committee, namely:

(*a*) All foods; (*b*) all beef or meat extracts; (*c*) all patent medicines and proprietary wines; (*d*) linseed meal; (*e*) oxygen will be paid for if used only in extreme cases.

NO PROPRIETARY PREPARATION for which there is an efficient substitute in the Leeds Pharmacopœia or the B.P.C. shall be allowed.

TRADE NAMES shall not be used.

PRIVATE FORMULÆ shall not be used.

LINIMENTS AND LOTIONS shall be dispensed in special bottles.

REP. MIST.—Doctors and pharmacists are reminded that "Rep. Mist." is not allowed, and that no prescription of this description must be dealt with, otherwise payment therefor will be disallowed by the Insurance Committee in accordance with instructions issued on May 29, 1914, to each doctor and chemist.

ALTERATIONS IN PRESCRIPTIONS.—Pharmacists are also reminded that alterations in prescriptions which increase the quantities must not be made, and that such alterations will be deducted from the respective accounts in accordance with a notice given by the Pharmaceutical Committee. Also that any incomplete prescriptions should be returned to the practitioner who prescribes the same for completion and the placing of his initials opposite the alteration, otherwise the payment for the prescription will be disallowed by the Insurance Committee.

Leicester.—The Insurance Committee met on December 29, when it was reported that fifty-six chemists and one contracting firm are on the 1916 lists. It was stated that the Committee has incurred 200*l.* 10*s.* 3*d.* costs in respect to the excessive prescribing case which recently came before the High Court. On the Commissioners' advice no further steps are to be taken in the action, and the surcharges made on doctors for 1913 have been withdrawn.

Leicestershire.—At the suggestion of the Pharmaceutical Committee the Insurance Committee on January 5 adopted a recommendation by the Medical Benefit Sub-Committee that the price-list of J. Richardson & Co., Ltd., be taken for drugs, etc., not specified in the Drug Tariff other than the following: Homœopathic Preparations.—Epps' List: all dressings and appliances supplied in bulk by pharmacists for use in a panel practitioner's surgery in cases of emergency be priced at cost price on the new Tariff with the addition of 33⅓ per cent. A recommendation that serums, phylacogens, toxins, and bacterial vaccines should be supplied at makers' listed prices was deferred for further consideration. The Committee has agreed to pay the Joint Drug Committee one-third for checking prescriptions and chemists' accounts during the past year.

Middlesex.—Mr. W. S. Glyn-Jones, M.P., presided at the Insurance Committee meeting held at the Guildhall, Westminster, on January 3. Among the accounts passed for payment were chemists' to the amount of 1,589*l.* 14*s.* 9*d.* The Chairman explained that since the Insurance Sub-Committee had met it had been found that in all probability some advance would be required to meet the expenses of the Joint Committee appointed for the pricing of prescriptions. He could not state the exact amount, but they were under an obligation to pay a proportion of the expenses. He thought the amount was not to exceed 500*l.*, and he moved that an instalment of 150*l.* be paid by the Committee towards the expenses to be incurred by the Joint Committee. In reply to a member, Mr. Glyn-Jones added that if the expenses incurred exceed those of last year the surplus will be provided by the Insurance Commissioners. A member asked had the arrangement as to the pricing of prescriptions with the London Insurance Committee been terminated, and the Clerk stated that no reply had been received, but all were satisfied that Middlesex should go out of the arrangement. The Chairman's motion was adopted unanimously. The Medical Service Sub-Committee reported that a complaint had been addressed by an insured person, formerly resident in Surrey, that she had been charged 4*s.* 6*d.* for medicine by a panel doctor. The doctor alleged that he only charged for medicine prior to accepting the patient on his list, and contended that he was not entitled to give treatment until he received a registration-card from the Committee. The Sub-Committee were of opinion that the practitioner's action was not in accordance with the terms of his agreement or the scheme under which the Panel Committee agreed to provide treatment for all insured persons in the county who present a medical card. They recommended, and the Committee agreed, that 4*s.* 6*d.* should be deducted from the amount payable to the doctor. It was also decided that in future further steps will be taken when illegal charges are made and proved. The Chairman announced that the number of doctors on the panel for 1915 was 597, and for the current year 581. The numbers of chemists were 306 in 1915 and 291 in 1916.

Norwich.—At the meeting of the Insurance Committee on January 4, Mr. W. M. Burton, in submitting a report by the Medical Benefit Sub-Committee on the prescription-pricing scheme, said the salaries proposed to be paid, especially in London, were very much less than ought to be paid for the work expected to be done. Some of the persons to be employed in London were expected to work for 15*s.* a week, and young women capable of pricing prescriptions were to be paid 1*l.* a week. The actual cost would in the end work out at something very much higher than was estimated. The Medical Benefit Sub-Committee felt, however, that they had no alternative but to recommend the Committee to adopt the scheme. Dr. Odhams seconded the motion. Mr. F. J. Crotch moved that the matter should be held over, on the ground that it was a scheme to increase expenditure. Mr. Witard seconded. The Chairman (Mr. Barley) said he felt as much repugnance to this scheme as any other member of the Committee, and mentioned that it was the Commissioners who used their influence in favour of London, and practically vetoed Norwich. On being put to a division the amendment was lost, but it was agreed to make the following addition to the motion: "But protest most strongly against the methods adopted by the Commissioners to force their cut-and-dried adopted scheme upon the Insurance Committees, while pretending to consult the delegates on other possible schemes." In this form the motion was carried.

Plymouth.—At the meeting of the Insurance Committee on December 31, the Medical Benefit Sub-Committee reported that they had considered a letter from the Secretary of the Pharmaceutical Committee containing particulars of concessions desired by chemists before entering into contracts for the year 1916. A number of chemists on the panel gave notice of their intention to determine their contracts. It was proposed to send a copy of the letter and enclosure to the Commissioners with a request for their observations. This was agreed to after Mr. A. Webber explained that the Sub-Committee had met the chemists in one or two directions, so that a good number of the notices to determine contracts had been withdrawn, but about six chemists would not go on the panel for 1916. Mr. S. R. Williams (chemist) said that, although an adequate panel had been formed, the position was most unsatisfactory to the chemists, and unless something was done it was quite possible that what had occurred would recur at Midsummer.

Portsmouth.—The Insurance Committee agreed on December 30 to pay chemists' accounts for the first quarter of 1915 and to pay 90 per cent. of the fourth quarter's accounts. It was agreed, on the recommendation of the Finance Sub-Committee, not to join the prescription-pricing group as there would be nothing to gain either in cost or efficiency. In regard to the 1916 dispensing agreements and Tariff, the Panel Committee desired the 1915 arrangements as to copying-fee and the use of "Rep. mist." to continue, and the Pharmaceutical Committee wanted, in addition to the copying-fee, a late fee for "urgent" prescriptions. These recommendations were referred to the Commissioners and the Medical Benefit Sub-Committee. Mr. W. Gourd and Mrs. F. C. Francis, successors to the late Mr. F. C. Francis, Portsmouth, have resigned from the chemists' panel, and Mr. F. A. Harding, 49 Highland Road, Eastney, has rejoined it after resignation.

Sheffield.—The Insurance Committee received on January 5 a report in regard to the prescription-pricing bureau, which is to be joined; owing to this the pharmacist-checker's agreement terminates on January 31. The Commissioners advised the Committee to settle with doctors for 1914, as all available information had been obtained. Chemists' accounts for November amount to 976*l.*, and it was decided to pay 75 per cent. It was agreed to accept the tender of Greenup & Thompson for the supply of prescription-books for three months at 2½*d.* each, *plus* 15 per cent. The Clerk reported that the Pharmaceutical Committee requested the Committee to allot to them 311*l.* for administrative expenses. The application was referred to the Commissioners. Mr. L. T. Goucher, chemist, Arundel Street, desired to have his name removed from the panel, and this was agreed to. The new list contains the names of fifty-nine chemists and thirteen contractors for drugs, etc., with a total of 102 places of business. The Clerk reported that a number of chemists had intimated that owing to curtailment of light and difficulty in obtaining assistance the dispensing hours are to be shortened, mostly in the evening. Nevertheless, twenty-one places of business are open until 8.30 P.M. and

eleven until 9 P.M. It was pointed out, however, that in the centre of the city the provision of obtaining medicines after 8 P.M. does not appear to be adequate, and it was decided that the Pharmaceutical Committee be requested to consider the matter and report.—A special Medical Benefit Sub-Committee has issued a long report on an investigation under Article 40 of the Regulations by the Panel Committee as submitted by the Pharmaceutical Committee. The Panel Committee unanimously conclude that the doctor's prescriptions which were examined were between 30 per cent. and 40 per cent. above what was necessary as judged by the normal standard of prescribing in practice, but to ensure that absolutely no injustice is inflicted on the practitioner, and indirectly on his patient, the Committee recommend a surcharge of 15 per cent. on the total cost of the prescriptions under review. Among many items of defence put forward by the doctor were: (1) The length of time since the date of prescribing; (2) every prescription was considered before the scrip was written; not seeing the patients the Panel Committee have no evidence to put forward to bolster up a surcharge; (3) nearly every member of the Panel Committee has an axe to grind, "a pocket" at stake. The doctor also submitted that the Committee must produce absolute evidence in fact, and not according to any niggardly ideas held by members of the Committee, or with any idea of securing the floating sixpence. The Medical Benefit Sub-Committee on the report decided to surcharge to the extent of 12*l.* 16*s.* 3*d.*

Southport.—At the Insurance Committee meeting on December 29, Dr. Penrose moved that a resolution by the Medical Benefit Sub-Committee stopping repeat prescriptions should be deleted. Dr. Pridie seconded this amendment. Mr. F. Battersby (pharmacist) said it was not unreasonable so long as repeats are restricted to a particular month, but he submitted that they give chemists a great deal of work, and that some restriction as to time is necessary. In the course of further discussion Dr. Penrose expressed his willingness to have the minute referred back, so that it may be altered to cover repeats within the month that the original prescriptions are written.

Surrey.—The Insurance Committee have now issued the revised panel lists of chemists and doctors for 1916. The list of chemists whose names have been deleted numbers twenty-four; of these five are out of the county, and six are businesses which have changed hands. In the latter instances the successors have gone on the panel, but two businesses have been closed. This makes a net loss of eleven, but this is reduced to five by the addition of two new names of chemists in the county and four out of the county. In Walton-on-Thames all the chemists except a company shop have gone off the panel. In seven other places in the county one or two chemists have not renewed their agreements. Many others were in doubt about resigning from the panel, but it was thought that in the present national crisis it would not be patriotic to do so.

Sussex (East).—At a meeting of the Insurance Committee on January 4, the Medical Benefit Sub-Committee reported on a conference held with the chemists on December 16 in reference to the arrangements for the supply of drugs during 1916, and of the subsequent action taken in regard thereto. The Sub-Committee resolved (1) to report to the Committee, with the addition of a reference to the Conference with the Executive Committee of the Local Medical and Panel Committees, the form of this to be submitted to the Chairman of the Committee for his approval; (2) that a copy of the report be circulated among all chemists on the panel for 1915; (3) that representation be made to the Commissioners in accordance with the undertakings given at the conference with pharmacists; and (4) that in the event of the suggested restriction on "repeat mixtures" being approved by the Panel Committee, the Clerk be authorised to give formal notice of it to panel practitioners. Mr. Pargeter, in moving the adoption of the report, said the chemists had met them in a very fair way, that the doctors were making an effort to deal with the subject of "repeat mixtures," and are making a fair offer to the chemists. Most of the chemists had withdrawn their resignations. The report was adopted.

SCOTLAND.

The 1916 Tariff.

Mr. J. Rutherford Hill, Secretary to the Pharmaceutical Standing Committee (Scotland), issued on December 30, 1915, the 1916 Tariff for Drugs, Appliances, and Dispensing Charges, which is substantially the same as before, with certain modifications in the prices—*e.g.*, 8-oz. bottles are now 1½*d.* each, and some other bottles are also higher. The starred articles which are subject to monthly alterations in price are as follows:

Acetanilidum.	Ferri et quinin. cit.	Potass. carb.
Acetomorph. hydrochlor.	Ferrum tart	Potass. chlor.
Acid. acetic. glacial.	Glycerin. belladon. (B.P.C.).	Potass. cit.
Acid. acetylsal.	Guaiacolis carbonas.	Potass. iodid.
Acid. benzoic.	Hexamina.	Potass. nitras.
Acid. carbolic.	Homatropin. hydrobrom.	Potass. permang.
Acid. carbolic. liq.	Hydrarg. iod. rubrum.	Potass. sulphas.
Acid. citric	Hydrarg. ox. flav.	Potass. tart.
Acid. hydrobrom. dil.	Hydrarg. perchlor.	Potass. tart. acid.
Acid. salicylic.	Hydrarg. subchlorid.	Pulv. cretæ arom. cum opio.
Acid. tartaric.	Hydrarg. ammon.	Pulv. glycyrrh. co.
Adeps.	Hydrarg. cum cret.	Pulv. ipecac. co.
Adeps benz.	Iodoformum.	Pulv. opii co.
Adeps lanæ.	Iodum.	Pulv. rhei co.
Adeps lanæ hydros.	Lin. belladon. meth.	Quininæ hydroch.
Ammon. benzoas.	Lin. camph.	Quininæ hydroch. acid.
Ammon. brom.	Lin. chlorof.	Quininæ sulph.
Atropin. sulph.	Lin. methyl. sal. co.	Resorcinum.
Bals. Peru.	Lin. opii.	Rhei rad. pulv.
Betacain. hydroch.	Lin. pot. iod. cum sapon.	Salicin.
Bismuth. carb.	Liq. atropin. sulph.	Salol.
Bismuth. oxid.	Liq. bismuth. et ammon. cit.	Santonin.
Bismuth. salicyl.	Liq. morph. acet.	Soda tart.
Bismuth. subgal.	Liq. morph. hydrochlor.	Sod. benz.
Bismuth. subnit.	Liq. opii sed. (B.P.C.)	Sod. brom.
Butyl-chlor. hyd.	Liq. trinitrini.	Sod. cacodyl.
Caffeina.	Lithii carb.	Sod. cit. tart. effer.
Caff. cit.	Lithii cit.	Sod. iodid.
Calcii glycerophosph.	Lithii cit. effer.	Sod. phosph. effer.
Calcii lact.	Magnes. levis.	Sod. salicyl.
Capsulæ creosot. mij.	Magnes. pond.	Sulphonal.
Chloroform	Magnes. carb. lev.	Syr. chloral.
Chloral hydras.	Magnes. carb. ponderosus.	Syr. codeinæ phosph.
Cocain. hydrochlor.	Malourea (B.P.C.).	Tablettæ phenacetin. (B.P.C.).
Codeina.	Methylsulphonal.	Tablettæ phenacetin. co. (B.P.C.).
Codein. phosph.	Morphinæ acet.	Theobromin. et sod. salicyl.
Collodium belladon. (B.P.C.).	Morphinæ hydrochlor.	Thymol.
Collodium salicylic. comp. (B.P.C.).	Naphthol.	Tinct. iodi fort.
Creosoti carb.	Ol. abietis.	Tinct. iodi mitis.
Creosotum.	Ol. amygd.	Tinct. opii.
Digitalinum.	Ol. menth. pip.	Tinct. opii ammon.
Emul. olei morrh. (B.P.C.).	Ol. morrhuæ.	Ung. belladon.
Emul. olei morrh. c. hypo. (B.P.C.).	Ol. olivæ.	Ung. gall. cum opio.
Ext. belladon. sic.	Ol. ricini.	Ung. hydrarg.
Ext. belladon. liq.	Opii pulv.	Ung. hydrarg. amm.
Ext. belladon. vir.	Paraldehyd.	Ung. hydrarg. co.
Ext. cannabis ind.	Phenacetin.	Ung. hydrarg. iod. rub.
Ext. ergot.	Phenazon.	Ung. hydrarg. nit.
Ext. ergot. liq.	Phenolphthalein.	Ung. hydrarg. oleat.
Ext. filic. liq.	Potassa sulphurata.	Ung. iodoform.
Ext. glycyrrh. liq.	Potass. acetas.	Ung. plumbi iod.
Ext. malti c. ol. morrh. (B.P.C.).	Potass. bicarb.	Ung. pot. iod.
Ext. nucis vom. sic.	Potass. brom.	Ung. sulph.
Ext. opii liq.		Ung. zinci.
Ext. opii sic.		Vinum ipecac.
Ferri et ammon. cit.		Zinci valerian.

The prices are quoted under ounce, 4 dr., 3 dr., 2 dr., 1 dr., and 30, 20, 15, 10, 5, 2, 1, and ½ gr. or minim quantities, subject to alteration in the above instances. In regard to this matter the covering letter says:

"The starring of drugs affected by the war has been carefully reconsidered and adjusted to date. The allowance for bottles most commonly used has been increased. The monthly revision of starred drugs will be continued as last year. You will by this time have carried out the recommendation of the General Council of Panel Chemists (Scotland) by cancelling your withdrawal notice and allowing the existing agreement to continue meantime. If not, my Committee earnestly appeal to you to support the general policy of the craft by doing so immediately. By unprecedented unanimity only have we secured deliverance from a threatened injury, and only by similar unanimity can we hope for success in the efforts still essential to attain the more satisfactory conditions we have in view. We have protested to the Insurance Commissioners and Insurance Committees against any attempt to eliminate the Pharmaceutical Committee or interfere with its powers and functions under the Insurance Acts and relevant Regula-

Liquorice-juice (M'seilles) cs. 40
Liquorice-root (Malaga) bls. 10
Lithopone (R'dam) cks. 459
Magnesia (Philadel.) bgs. 536
Magnesite (Madras) bgs. 861
Menthol (Japan) cs. 10; menthol and mint oil (Japan) cs. 20
Methyl acetone (N.Y.) dms. 12
Milk-powder (R'dam) cs. 120
Mineral waters (Treport) cs. 1,965
Mint oil (Japan) cs. 30
Nutmegs (Penang) cs. 78
Nux vomica (Cocanada) pkgs. 324
Olibanum (B'bay) cs. 59, (Aden) 22
Olive oil (Genoa) cks. 251, cs. (Malaga) brls. 119, (B'deaux) cs. 500, (M'seilles) pkgs. 67
Opium (H.-Kong) cs. 28, (B'bay) pkgs. 138, (S'pore) cs. 5
Orchella-weed (Colachel) 40
Orris (Leghorn) bls. 100
Pepper (S'pore) bgs. 8,770, (Penang) 890
Perfumery (Dieppe) cs. 40, (Boulogne) cs. 27
Potash (St. John, N.B.) brls. 6
Quinine (Amst.) cs. 92
Rape-seed (Karachi, etc.) bgs. 16,749
Rape oil (S'ghai) cks. 210, (Kobe) cs. 5,500
Roots, barks, herbs, leaves, etc. (N.Y.) pkgs. 180; *herbs* (Boulogne) bls. 30, (M'seilles) bls. 75; *leaves* (M'seilles) bls. 57; *seeds* bgs. 111
Rose oil (B'bay) pots 10
Rosin (Spain) brls. 331
Saffron (Valencia) cs. 2
Saltpetre (B'bay) bgs. 2,593
Sandalwood (B'bay) 80, (Calicut) 156
Senna (Tuticorin) 205
Shellac (C'cutta) cs. 250
Soda carbonate (Uddevalla) cs. 40
Soda, caustic (Uddevalla) cs. 60
Soda nitrate (Chile) bgs. 20,413
Soy (H.-Kong) cks. 100, (Kobe) 200
Soya-bean oil (S'ghai) cks. 584, (Hankow) dms. 45
Tartar (St. Nazaire) bgs. 464
Tartaric acid (L'horn) brls. 36, cks. 36
Thorium nit. (Philadel.) bxs. 40
Urea (Go'burg) cs. 10
Valonia (Githion) bgs. 3,257
Verdigris (B'deaux) cks. 16
Wax, bees' (C'cutta) cs. 49, (S'ghai) 18, (P. Said) 112, (Beira) 33, (M'seilles) bls. 64, cs. 22, (St. Nazaire) cs. 19, (Beira) blks. 39, pkgs. 40, (Del. Bay) 155
Wax ceresin (A'dria) 60
Wood oil (S'ghai) cks. 58, (H.-Kong) dms. 120, (S'pore) dms. 100
Zinc oxide (R'dam) 575, (N.Y.) 600

To Liverpool.

Acetic acid (Pasages) brls. 50, (Boston) brls. 38
Alcohol, wood (N. News) dms. 86
Antimony (Boston) cs. 230
Antimony ore (Halifax, N.S.) 103
Aniline (M'seilles) cks. 600
Antimony (Chile) bgs. 4,632, (Callao) 73, (Colon) 233
Araroba (Bahia) cs. 22
Arsenio (N.Y.) kgs. 100
Barytes (Halifax) 53, (Spain) 2,209
Bay rum (St. Thomas) cs. 4
Bleaching-powder (N.Y.) dms. 769
Canary-seed (Seville) bgs. 50
Castor oil (C'cutta) cs. 700
Cinnamon chips (Cey.) 25
Cochineal (L. Palmas) 108, (Callao) 73
Coconut oil (Ceylon) pps. 349
Cod-liver oil (St. John's) brls. 361
Cod oil (St. John's) cks. 91
Cream of tartar (B'deaux) cks. 40, (Tarragona) 14, (B'lona) cks. 23
Drugs (N.Y.) cs. 200, (Havre) cs. 13, (Boston) cs. 96
Formaldehyde (Boston) brls. 35
Glucose (N.Y.) 300
Glycerin (Pasages) brls. 20
Ipecacuanha (M. Video) bls. 99, (Bahia) 9
Leaves, dried (M'seilles) bls. 32; *seeds* 268
Milk-powder (N.Y.) cs. 224, (Bilbao) brls. 86
Mineral waters (Rouen) cs. 300
Mineral white (B'deaux) bgs. 3,650
Pepper (W.C. Africa) bgs. 135
Perfumery (Havre) cs. 61
Olive oil (M'seilles) cs. 200, (Seville) brls. 1,276, (Malaga) brls. 195
Palm-kernels (W.C. Africa) bgs. 37,974, tons 460
Palm oil (W.C. Africa) cks. 1,048
Petrolatum (N.Y.) brls. 70
Phosphorus (N.Y.) cs. 40
Potash (Bilbao) bgs. 120
Potash bicarb. (N.Y.) cks. 14
Potashes (Portland, Me.) cks. 26
Quebracho ext. (B. Ayres) bgs. 40,000
Quicksilver (Spain) bott. 25
Roots, barks, etc. (N.Y.) bls. 20, (Bilbao) bgs. 86
Rosin (Brunswick) brls. 6,000, (B'deaux) 50
Shellac (C'cutta) 35
Soda ash (Boston) brls. 130
Soda phosphate (N.Y.) brls. 400
Soda sulphate (Boston) brls. 79
Sulphur (N.Y.) brls. 177
Tartar (B'lona) brls. 92
Tartaric acid (Genoa) brls. 20
Wax, bees' (Rio) bgs. 45, (Boston) cs. 14, (Gijon) bls. 6
Zinc oxide (Boston) 1,300

To Manchester.

Calcium carbide (Skien) 455
Chamomiles (Rouen) bls. 11
Dextrin (Ba'more) 215
Liquorice-juice (Genoa) cs. 10, (Catania) cs. 132
Magnesite (Drammen) bgs. 693
Phosphorus (St. John's) cs. 160
Soda nitrate (Skien) cks. 117
Soda pruss. (Havre) cks. 19
Sulphur (Catania) pkgs. 10,181
Tartaric acid (Naples) brls. 14, (Genoa) brls. 49
Wax, bees' (Boston) cs. 5

To Hull.

Acetic acid (N.Y.) brls. 25
Calcium carbide (Civita V.) dms. 3,620
Carbon black (N.Y.) cs. 100
Castor-seed (B'bay) bgs. 7,637
Cottonseed (A'dria) tons 1,740, (B'bay) bgs. 6,781
Dextrin (R'dam) 50
Lemon oil (Palermo) ½ cs. 4
Linseed (B'bay) bgs. 45,818
Liquorice-juice (Naples) cs. 20
Olive oil (Leghorn) bxs. 25, cs. 34
Rape-seed (B'bay) bgs. 6,020
Soda pruss. (R'dam) cs. 20
Tartaric acid (Naples) brls. 8
Zinc oxide (R'dam) 25

To Bristol.—Sodium sulphide (N.Y.) dms. 32; valonia (Astaco, etc.) bgs. 1,774. *To Fleetwood.*—Fustic tons 63; logwood tons 963; logwood-roots tons 1,063 (all from Jamaica). *To Folkestone.*—Chemicals (Calais) pkgs. 6; drugs (Boulogne) pkgs. 15; perfumed spirits (Boulogne, etc.) cs. 8; perfumery (France) pkgs. 24. *To Goole.*—Creosote salts (R'dam) bgs. 1,000. *To Harwich.*—Fruit-essences (R'dam) pkgs. 25.

Correspondence

Letters for this section should be written on one side of the paper only. The writer may adopt an assumed name for purposes of publication, but he must in all cases furnish his real name and address to the Editor.

Emp. Calefaciens, B.P. 1914, Spread.

SIR,—This plaster seems to have need of some change in its appearance. As supplied at present it looks so like ordinary adhesive plaster that it might easily be mistaken for the latter, and if used in error for it might have serious consequences; it certainly would not add to the comfort of a patient who had a wound strapped with it. Would it not be well that some change be made so as to give it a characteristic appearance? This might be done by having it spread on some specially coloured cloth, or by having the words "Emp. calefaciens" printed at short intervals on the back, or perhaps by the adoption of both, which would be still better. I should be glad to hear some of your readers' opinions on the subject.

Yours faithfully,

Rathkeale, Ireland EDWARD A. WHELAN.

German Atrocities in Belgium.

SIR,—Referring to your note, entitled "German Atrocities in Belgium," in the *C. & D.*, January 1, p. 36, I beg of you the favour of a small space in your journal to rectify the assertion of Herr von Bissing, the German Governor, that the pharmacists, victims of the war, have fallen especially as a result of the bombardment of Belgian cities. The body of my colleague and friend, Camille Vertruyen, was recognised among the victims drowned in a private cistern in Aershot. Not less than thirty-two bodies were found in the latter. Von Bissing's mysteries! This is one case among many others. Camille Vertruyen was a young pharmacist of about thirty years of age, qualified in 1909 by the University of Louvain. Clever and intelligent, he was the man who could mix good humour with the aridity of the pharmacy; his figures were the expression of a great intelligence, and Aershot's people will lose in him one of the most important of their pharmacists. He leaves behind a young widow and two children. What is "Kultur"?

Bayswater, W. LÉON MAERTENS, Belgian pharmacist.

Shortage of Bottles.

SIR,—I see one of your correspondents is asking about bottle-washing. This bottle-shortage is going to be a serious matter, and the question of washing bottles will come more and more to the front. On anything like an extensive scale it should be taken up on most careful lines, as in careless work lie many dangers. To deal with the bulk is easy enough when they have contained matter easily soluble in hot water. It is the oily, the smelly, and the coated bottles where the trouble comes, and these require most careful treatment. All such should be left some days, in some cases a week or more, in a soaking-tub containing weak soda-solution, each bottle filled to the neck, when it will be found that half the work of cleaning has been done. Pass the soaked bottles into another tub containing a fresh supply of weak soda-solution, shaking each bottle carefully when emptying. In the second tub a bottle-brush may be used; if this is done in the first process the brush soon gets sticky and clogged with oily matter. The third process is rinsing with a rinsing-tap under a good forceful pressure of water, filling each bottle to the brim to force out any gaseous smell. Bottles after having been washed several times begin to show what they are, and with the best of attention will look second-rate.

Yours sincerely,

Erdington. WM. BOUSFIELD.

Insurance Prescription Pricing and Checking.

SIR,—I am glad to see the question of the pricing and checking of prescriptions under the 1916 Tariff brought up in your columns. As I understand the matter, the pricing is to be done for the Insurance Committees by girls who have just left school and have had no technical training of any description. Is this fair to chemists and druggists, who must have spent three years in the translation of physicians' prescriptions before they are allowed to enter for the Minor examination? According to reports and statements published in your columns, the scheme which is being practically forced upon English Insurance Committees has been drafted by the Insurance Commissioners with the assistance of the Pharmaceutical Society. Presumably, as a *quid pro quo* for their assistance in drawing up this

precious scheme, the Insurance Commission are allowing the Pharmaceutical Society to add to their revenue by checking the prescriptions at the expense of the Drug Fund. It has been stated that the charge proposed by the Pharmaceutical Society for checking (*sic*) the prescriptions will be equivalent to 1 per cent. on the chemist's account, which means that the Society's revenue will be increased by several thousand pounds taken from the Drug Fund. This may be called protecting the interests of chemists, but I should like to know why the pricing should not be done in the first instance by properly qualified persons, instead of having "one expert in pharmacy" to deal with some two million prescriptions annually. It is presumed that these untrained girls will each be able to read and price 1,000 prescriptions per day, and the staff for these central pricing bureaus is drawn up on this assumption. I should question very much whether it is intended to spend this large amount of money on checking prescriptions in view of what is known as to the cost and methods of pricing and checking which have hitherto prevailed at Bloomsbury Square. Those of us who have had prescriptions priced at the Society's headquarters are too painfully aware of the absurd mistakes made by these "checkers," who, in many cases, saw a prescription for the first time after commencing the work of pricing or checking; but what can be expected from sweated and unskilled labour? Of course we are told, in pursuing the policy indicated, the Pharmaceutical Society has safeguarded the best interests of chemists, but has it?

Yours faithfully, HAD SOME. (85/74.)

Subscribers' Symposium.

For interchange of opinion among "C. & D." readers, and brief notes on business and practical topics, especially new ideas.

Whitening Poultry Feathers.

L. W. B. (87/26) asks the nature of the white powder used by poultry-specialists for whitening the feathers previous to showing. Zinc oxide has been tried, but does not stick sufficiently.

Kava (Kava rhizoma, B.P.).

"Mr. W. H. Goss (*C. & D.*, May 29, 1915, p. 62) is mistaken in supposing that the Polynesian kava-chewers expectorate the saliva, which is then allowed to ferment. As a matter of fact, the root is chewed to a stiff doughy mass, which is placed in the kava-bowl (in Fiji called *tarnoa*). When a sufficient number of the chewed masses have been prepared, water is added and well mixed. The fibre is now strained out by means of a bundle of hibiscus-fibre, held at each end closely and pulled gently along the bottom of the bowl towards the operator so as to entangle the sawdust-like fibre. The strainer is squeezed and shaken out to get rid of the fibre, and this is repeated until the liquid is sufficiently strained. The clay-coloured, muddy liquid, which contains much starch, is then drunk out of coconut-cups (Fijian=*bilo*). Stale or fermented kava is never used. The liquid is not alcoholic or intoxicating, but depends for its stimulating properties on the two resins, alpha and beta kava-resins, and probably also on the crystalline principle kavahin or methysticin. The name of the kava-plant is *Macropiper methysticum*."—*Thos. Steel* (Sydney, N.S.W.).

Medical Latin.

M. P. S. (85/37) writes: "The advertisement quoted in the *C. & D.* last week from the 'Melbourne Argus' is a fine idea, but is it quite certain that the doctors will be able to read it? Some of the older hands may, but the young graduates, especially the men who have 'gone through' without compulsory Latin, will have considerable difficulty in deciphering such advertisements. Not being too sure of my ground I refrain from offering a translation, though it almost looks to me as if Mr. Bull had omitted a relative pronoun. However, I leave criticism to the expert, but would suggest that an advertisement couched in English medical terms might be just as incomprehensible to the layman without any risk of fatiguing the medical intellect by demanding a translation. When an advertisement does not appeal to us at the very first glance it has failed in its mission, and once we pass it by we never return to it (unless there be a prize coupon attached, which seems to be an unfailing attraction to so many people of aimless existence). My own idea is that Mr. Bull will not find the experiment a successful one, but I hope he will write and let us know how it panned out."

Miscellaneous Inquiries.

Picro (68/17).—Casein and sugar are the best absorbents for liquid paraffin which it is desired to solidify.

J. L. & Co. (74/49). COAL-SAVERS.—See *C. & D.*, November 13, 1915, p. 66.

Minor Student (83/65).—As a person who has attested under Lord Derby's scheme, when you are called up you and your employer should apply to the local tribunal for postponement of your call in accordance with the particulars given in the *C. & D.*, November 27, p. 38, and December 11, p. 34.

B. B. & Co. (73/13).—BRILLIANTINE:

Separable.		*Non-separable.*	
Castor oil ...	ʒij.	Castor oil ...	ʒij.
Almond oil ...	ʒiv.	Rectified spirit ...	ʒviij.
Perfume oils ...	♏xv.	Oil of neroli ...	♏v.
Absolute alcohol to...	ʒvj.	Oil of rose-geranium	♏x.
		Oil of verbena ...	♏v.
		Oil of lemon ...	ʒss.

Metal (77/66).—The best way of using up a mixed lead-and-tin foil is to employ it in the manufacture of solder. The separation of the two metals is economically impracticable on a small scale.

A. H. H. (72/23).—BOOKS ON ELECTRO-THERAPEUTICS.—Humphris's "Electro-therapeutics" (8*s.* 6*d.*, Arnold); H. L. Jones's "Medical Electricity" (12*s.* 6*d.*, Lewis). The article on the subject in the *C. & D. Diary*, 1911, should also be consulted.

E. W. (69/29).—(1) ADULT COUGH-MIXTURE, "P.F. 2":

Chlorodyni ...	ʒviij.
Ext. ipecac. liq. ...	ʒiv.
Oxymel. scillæ ...	℔. ij.
Theriacæ purif. ...	℔. ij.
Aquæ ...	℔. vij.

Misce. ʒss. t.d.s.

(2) PHOSPHORISED QUININE-AND-IRON TONIC, "P.F. 3":

Quin. sulph. ...	gr. xij.
Ac. sulph. dil. ...	q.s.
Liq. ferri phosph. magnet. ...	ʒij.
Inf. quass. conc. ...	ʒss.
Aq. chloroformi ad ...	ʒvj.

Misce.

(3) The "P.F." number requires to be placed on the label of the preparations which are sold by chemists under the "known, admitted, and approved" remedies exemption.

Aspirin (74/21).—MANUFACTURE OF FINE CHEMICALS.—The last three volumes of THE CHEMIST AND DRUGGIST and *The Chemist and Druggist Diary* contain much information on the manufacture of fine chemicals. There is no book published which covers the same ground.

E. S. O'C. (66/44).—(1) "DRY" LIQUID SHAMPOO.—The following is a non-saponaceous form of liquid shampoo:

Strong solution of ammonia ...	ʒss.
Oil of bitter almonds ...	♏xv.
Tincture of quillaia ...	ʒiij.
Lavender-water ...	ʒv.
Rectified spirit to ...	ʒxij.

(2) CHLOROPHYLL is as cheap a green colour as you can have for spirituous liquids or ointments. Spinach is an inexpensive source of chlorophyll, while grass is cheaper still.

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," Jan. 15, 1866.

Gossip.

Mr. Frank H. Lescher has been admitted into partnership with the well-known firm of Evans, Lescher and Evans, of 60 Bartholomew Close.

At Professor Tyndall's fourth lecture "On Sound," in the Royal Institution, on the 2nd inst., Mr. Bird, the well-known chemist of Birmingham, exhibited and played upon his grand six-octave set of musical glasses.

Mr. Samuel Kay, of Stockport, operative chemist, has taken into partnership his brother, Mr. Thomas Kay, late of Mr. Peter Squire's establishment. The business is now carried on under the title of Kay Brothers.

At a weekly meeting of the Chemists' Assistants' Association (Mr. Willmott, President, in the chair), the question, "Would it be desirable for the Government to bring in a Bill restricting the sale of 'certain dangerous drugs to be scheduled in the Bill,' to examined and registered persons?" was decided in the affirmative by all present.

At the Royal Institution Professor Tyndall, F.R.S., will deliver ten lectures "On Heat," on Tuesdays and Thursdays, from January 23rd to February 22nd. They will be followed by twelve lectures "On the Non-Metallic Elements," by Professor Frankland, F.R.S., on Tuesdays and Thursdays, from February 27th to March 22nd, and April 10th to 19th. The hour fixed for these lectures is 3 o'clock.

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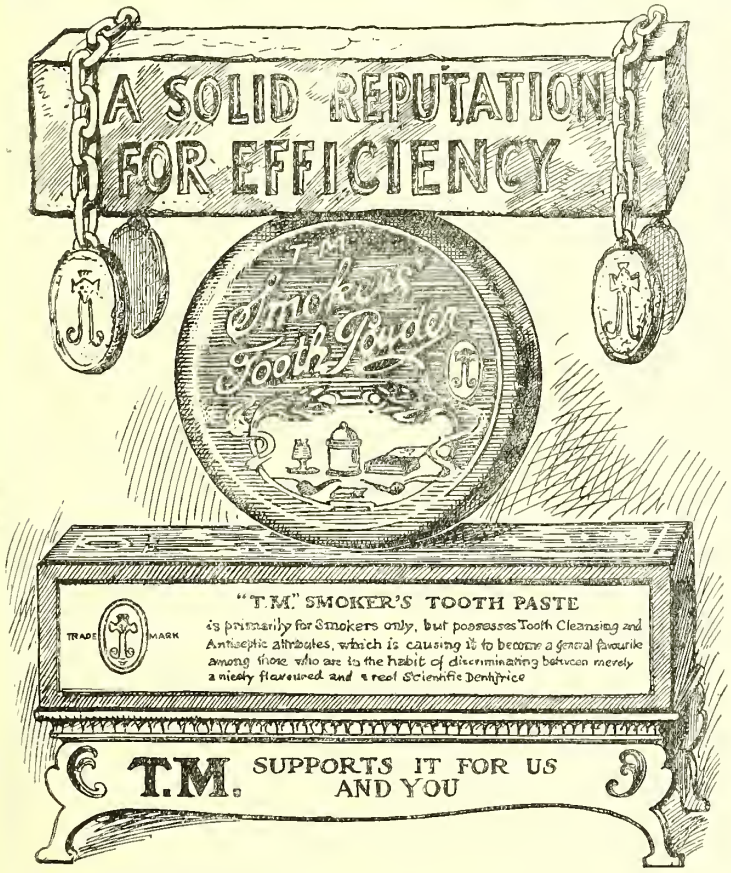

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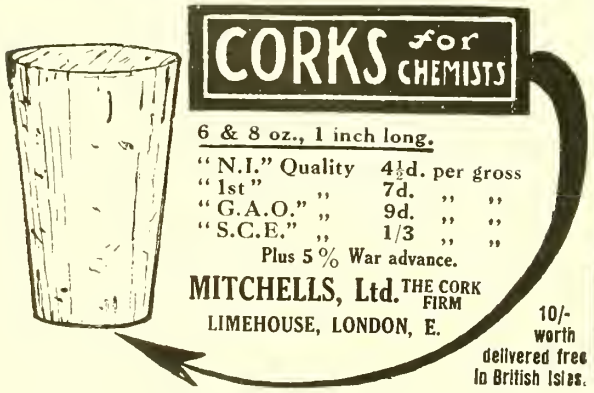

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Formaldehyde, 40%, 4 cwt. barrels @ 64/- cwt.; 7 lbs. @ 11d. lb.
Fuller's Earth, fine powder or lump, 5 cwt. @ 8/3 cwt.; 1 cwt. @ 9/6 cwt.

Gallæ Cærul. Pulv., 7 lbs. @ 1/3 lb.
Gamboge, English Ground, 7 lbs. @ 3/10 lb.; 1 lb. @ 4/2 lb.
Ginger, English Ground, 1 cwt. @ 46/- cwt.; 7 lbs. @ 7d. lb.
Gingerine, Extra, 5 lbs. @ 13/- lb.; 1 lb. @ 13/6.
Glycerin, Opt. D.D., 1.260 P.B., 1 cwt. @ 119/- cwt.; 56 lbs. @ 121/- cwt.; 12 lbs. @ 1/3 lb.
*Glycerin, Acid. Boric, P.B., 6 lbs. @ 2/- lb.
* „ Acid. Carbolic. P.B., 6 lbs. @ 1/9 lb.
* „ Acid. Tannic, P.B., 6 lbs. @ 2/4 lb.
„ Belladon. B.P.C., 6 lbs. @ 4/6 lb.; 1 lb. @ 5/- lb.
*Glycerin. Boracis, P.B., 6 lbs. @ 1/5 lb.
* „ Pepsin. Acid, P.B., 1 lb. @ 3/3 lb.
* „ Plumbi Subacet. P.B., 6 lbs. @ 1/9 lb.
Guaiacol Carb., 1 lb. @ 80/- lb.
Guaiacol, pure, 1 lb. @ 36/- lb.
Gum Acaciæ sorts, 3 cwt. @ 75/- cwt.; 1 cwt. @ 80/- cwt.; 7 lbs. @ 9½d. lb.; English Ground Powder, No. 1, 1 cwt. @ 120/- cwt.; 7 lbs. @ 1/3 lb.; No. 2, 1 cwt. @ 100/- cwt.; 7 lbs. @ 1/- lb.
Gum Benzoin, Sumatra, 84 lbs. @ 1/8 lb.; 7 lbs. @ 1/10 lb.
Gum Catechu Nig., English Ground, 1 cwt. @ 75/- cwt.; 14 lbs. @ 8½d. lb.
Gum Guaiaci, 1 cwt. @ 1/3 lb.; 28 lbs. @ 1/5 lb.
Gum Juniper, 14 lbs. @ 1/- lb.
Gum Thus Elect., 2¼ cwt. @ 40/- cwt.; 28 lbs. @ 46/- cwt.
Gum Tragac. Elect., English Ground, 7 lbs. @ 8/3 lb.; 1 lb. @ 8/6 lb.

*Heading (Frothing Ess.), 5 lbs. @ 1/3 lb.; Heliotropine, 1 lb. @ 11/- lb.
Hellebore, White, Powder (Foreign Ground), 1 cwt. @ 45/- cwt.
Hexamethylenetetramine, 7 lbs. @ 6/6 lb.; 1 lb. @ 6/10 lb.
Honey, Pale Set, Jamaica, 3¼ cwt. @ 44/- cwt.; 28 lbs. @ 50/- cwt.; Californian, ¼ cwt. @ 52/6 cwt.; 7 lbs. @ 7½d. lb.
Hydrargyum, P.B., 10 lbs. @ 5/6 lb.; 1 lb. @ 5/10 lb.; Ammon., 28 lbs. @ lb.; c. Creta, 28 lbs. @ 2/6½ lb.; Iodid. Rub. 28 lbs. @ 16/2 lb.; Oxid. Rub., 28 lbs. @ 8/- lb.; Perchlor., Lump, 28 lbs. @ 7/7 lb.; Subchlor., 28 lbs. @ 7/4 lb.; Sulph. c. Sulph., 28 lbs. @ 7/- lb.; 7-lb. quantities 1d. lb. extra, 3-lb. quantities, 2d. lb. extra, 1-lb. quantities, 3d. lb. extra.
Hydrokinone, 1 lb. @ 40/- lb.

Ichthyol Ammon. chemical equivalent: Ammon. Ichthosulphonas, B.P. Codex, 7 lbs. @ 7/- lb.; 1 lb. @ 7/6 lb.
*Inf. Aurant. Conc., 1 to 7, 6 lbs. @ 1/7 lb.
* „ Aurant. Comp. Conc., 1 to 7, 6 lbs. @ 1/6 lb.
* „ Buchu Conc., 1 to 7, 6 lbs. @ 2/6 lb.
* „ Calumbæ Conc., 1 to 7, 6 lbs. @ 1/1 lb
* „ Caryoph. Conc., 1 to 7, 6 lbs @ 1/2 lb.
* „ Cascarilla Conc., 1 to 7, 6 lbs. @ 1/6 lb.
* „ Cinchonæ Acid, 1 to 7, 6 lbs. @ 1/9 lb.
* „ Gentianæ Co., 1 to 7, 6 lbs. @ 1/3 lb.
* „ Quassiæ Conc., 1 to 7, 6 lbs. @ 11d. lb.
* „ Rhei Conc., 1 to 7, 6 lbs. @ 1/8 lb.
* „ Rosæ Acid. Conc., 1 to 7, 6 lbs. @ 2/6 lb.
* „ Senegæ Conc., 1 to 7, 6 lbs. @ 2/5 lb.
* „ Valerian Conc., 1 to 7, 6 lbs. @ 1/6 lb.

Insect Powder, Opt., English Grd., closed flowers, 7 lbs. @ 3/- lb.; English Ground, ½ closed flowers, 4d. lb. less; Foreign Ground, 28 lbs. @ 1/6 lb.
Iodoform Pulv. B.P., 7 lbs. @ 20/6 lb.; 1 lb. @ 21/-
Iodum resub. B.P., 7 lbs. @ 18/9 lb.; 1 lb. @ 19/3 lb.
Isinglass, Brazil, fine cut, 7 lbs. @ 3/9 lb.; 1 lb. @ 4/- lb.; Russian finest, 7 lbs. @ 10/6 lb.; 1 lb. @ 11/- lb.; Ribbon or Sheet, 7 lbs. @ 2/9 lb.; 1 lb. @ 3/- lb.

Kamala, 7 lbs. @ 1/5 lb.; sifted, 1/9 per lb.

Lapis Pumicis, fine powder, 2 cwt. @ 11/- cwt.; 7 lbs. @ 2d. lb.; lump, 2 cwt. @ 16/- cwt.; 7 lbs. @ 3d. lb.
Liquorice Juice, 4 & 2-oz. Sticks, 1 cwt. @ 125/- cwt.; 28 lbs. @ 1/2½ lb.; 7 lbs. @ 1/3 lb.
*Lin. Aconiti Meth., 5 lbs. @ 1/7 lb.; 1 lb. @ 1/10 lb.
* „ Bellad. Meth., 5 lbs. @ 4/11 lb.; 1 lb. @ 5/2 lb. [1/1 lb.
„ Camph. P.B., 40 lbs. @ 1/- lb.; 9 lbs. @
„ Sapo Meth., 9 lbs. @ 9d. lb.
„ Terob. Acet., B.P., 5 lbs. @ 1/- lb.
Linseed c. Oil, Crushed, 3 cwt. @ 23/- cwt.; 1 cwt. @ 24/- cwt.
*Liq. Ammonii Acetatis Conc. 1-7, 6 lbs. @ 1/2 lb.; 1 lb. @ 1/5 lb.
* „ Ammon. Aromat., 6 lbs. @ 10d. lb.
* „ Antim. Chlor. Pure, 8 lbs. @ 10d. lb.
* „ Arsenicalis, B.P., 7 lbs. @ 4d. lb.; 1 lb. @ 7d. lb.
* „ Arsenil Hydrochlor., P.B., 7 lbs. @ 4d. lb.; 1 lb. @ 7d. lb.
* „ Bismuth, P.B., 6 lbs. @ 1/6 lb.
* „ Copaiba Buchu et Cubeb, 5 lbs. @ 2/11 lb.; 1 lb. @ 3/2 lb.
* „ Easton., p.s. 1-3, B.P., 1 lb. @ 3/5 lb.
* „ Ferri Dialysatus, 6 lbs. @ lb.
* „ Ferri Iod. p.s., 1-7, 1 lb. @ 8/- lb.
* „ Ferri Perchlor. Fort., P.B., 7 lbs. @ 6d. lb.
* „ Ferri Phosph. Co. p.s., 1-7, 7 lbs. @ 1/7 lb.
* „ Hamamelidis, B.P., 6 lbs. @ 1/3 lb.
* „ Hypophosph. Co., p.s., B.P.C., 1 lb. @ 3/10 lb.
* „ Iodi Fort, B.P., 5 lbs. @ 6/7 lb.
* „ Morphinæ Acet. or Hydrochlor., P.B., 6 lbs. @ 3/11 lb.
* „ Opii Sed., 5 lbs. @ 5/1 lb.
* „ Plumbi Subacet., P.B., 7 lbs. @ 6d. lb.
* „ Pruni Virg. p.s. 1-7, 5 lbs. @ 2/8 lb.
* „ Rhœados pro Syr., 1 to 7, 5 lbs. @ 2/7 lb.
* „ Rhei, p.s., 1-7, 6 lbs. @ 2/3 lb.
* „ Santali Co., 1 lb. @ 4/6 lb.
* „ Sennæ Dulc. 6 lbs. @ 1/7 lb.
* „ Sennæ pro Syr. 1-7, 6 lbs. @ 3/4 lb.
* „ Strychninæ Hyd. P.B., 6 lbs. @ 1/10 lb.
* „ Tolut. pro Syr. 1-7, 6 lbs. @ 1/9 lb.
* „ Trinitrini, B.P., 1 lb. @ 6/6 lb.
Lithia Carb. P.B., 28 lbs. @ 6/- lb.; 7 lbs. @ 6/3 lb.; 1 lb. @ 6/6 lb.
„ Citras, B.P., 28 lbs. @ 6/- lb.; 7 lbs. @ 6/3 lb.; pulv., 3d. lb. extra.
Lycopodium, 7 lbs. @ 5/4 lb.

Mag. Calc. Levis, 1 lb. @ 1/6 lb.
Mag. Calc. Pond., 7 lbs. @ 1/10 lb.; 1 lb. @ 2/- lb.
Mag. Carb. Pond., 7 lbs. @ 11d. lb.
Mag. Carb. Levis., 1 cwt. @ 50/-; 7 lbs. @ 6½d. lb.
Mag. Cit. Gran., 28 lbs. @ 1/- lb.; 6 lbs. @ 1/1 lb.
Mag. Sulph., fine druggists', B.P., 1 cwt. @ 19/6; 28 lbs. @ 2½d.
Manna, Good Flake, 14 lbs. @ 4/10 lb.; 7 lbs. @ 5/- lb.; 1 lb. @ 5/3 lb.
Menthol, dry white cryst., 60 lbs. @ 12/3 lb.; 5 lbs. @ 12/9 lb.

*Mist. Sennæ Comp., B.P., 20 lbs. @ 7½d. lb.; 6 lbs. @ 8½d. lb.
Morphinæ Acet. Hydrochlor. or Sulph., Pulv. B.P., 25 oz. @ 14/- oz.; 16 oz. @ 14/3 oz.; 8 oz. @ 14/6 oz.; 1 oz. @ 15/3 oz.; Pur. Præcip. Bimeconate or Tart., 1 oz. @ 19/- oz.
Morphinæ Diacetyl., 4 oz. @ 24/- oz.; 1 oz. @ 24/6 oz.; Hydrochlor., 6d. per oz. less.
Myrrh, Gum, English Ground, 28 lbs. @ 1/3 lb.; 7 lbs. @ 1/5 lb.

Naphthalene, Flake, 7 lbs. @ 6½d. lb.
Nux Areca, 1 cwt. @ 55/- cwt.; 7 lbs. @ 7d. lb.; powder, English ground, @ 80/- cwt.; 7 lbs. @ 9½d. lb.

Ol. Amygdal. Ang., B.P., 9 lbs. @ 3/1 lb.
Ol. Anethi Ang. B.P., 1 lb. @ 17/6 lb.
Ol. Anisi, E.I., 66 lbs. @ 3/6 lb.; 16½ lbs. @ 3/10 lb.; 4½ lbs. @ 4/6 lb.; 1 lb. @ 5/- lb.
Ol. Aurant., 12 lbs. @ 9/6 lb.; 1 lb. @ 10/3 lb.; not guaranteed absolutely pure.
Oil of Bays, genuine W.I., 1 lb. @ 14/6 lb.
Ol. Cajuput., B.P., 21¼ oz. bots. @ 4/9 lb.
Ol. Camphor. Essent., White, 80 lbs. @ 85/- cwt.; 40 lbs. @ 90/- cwt.; Brown, 40 lbs. @ 120/- cwt.
Ol. Caryoph. Ang., B.P., 9 lbs. @ 5/8 lb.; 4½ lbs. @ 6/- lb.
Ol. Cassiæ, 16 lbs. @ 4/- lb.; 6 lbs. @ 4/3 lb.
Ol. Cinnam., 1 lb. @ 32/- lb.; 1 oz. @ 2/3 oz.
Ol. Citronellæ, 9 lbs. @ 2/3 lb.
Ol. Coco. Nucis, finest White, 80 lbs. @ 60/- cwt.; 40 lbs. @ 62/- cwt.
Ol. Eucalypt., B.P., 1 cwt. @ 2/5 lb.; 28 lbs. @ 2/6 lb.; 9 lbs. @ 2/7½ lb.
Ol. Geranii Gall. Opt., 1 lb. @ 28/- lb.; 8 1-oz. bots. @ 2/3 oz.; 1 oz. @ 2/6 oz.; Turc., 1 lb. @ 12/6 lb.; 4 ozs. @ 15/- lb.
Ol. Gynocardiæ, 5 lbs. @ 4/- lb.; 1 lb. @ 4/3 lb.
Ol. Juniperi Ligne Exot., 9 lbs. @ 2/6 lb.
Ol. Lavand. ab Flor., 5 lbs. @ 13/6 lb.; 1 lb. @ 14/6 lb.
Ol. Menth. Pip. English, 5 lbs. @ 36/6 lb.; 1 lb. @ 37/6 lb.; Hotchkiss original bots., 21 oz. each @ 15/- lb.; 6 bots. @ 14/10 lb.; 18 bots. @ 14/4 lb.; American, 20 lbs. @ 10/- lb.; 4½ lbs. @ 10/8 lb.; 1 lb. @ 11/3 lb.; Japanese, 60 lbs. @ 4/7 lb.; 5 lbs. @ 4/9 lb.
Ol. Morrhuæ, 1915, finest non-freezing, 2-gall. tins @ 16/6 per gall.
Ol. Myrbane, 9 lbs. @ 2/3 lb.
Ol. Myristicæ, 7 lbs. @ 4/3 lb.; 1 lb. @ 4/6 lb.
Ol. Nucis Pallid., 2 gall. tins @ 6/11 gall.
Ol. Olivæ, P.B., good yellow, guaranteed pure, 45 gall. barrels @ 5/2 gall.; 2 gall. tins @ 6/6 gall.
Ol. Origani Rub., Coml., 28 lbs. @ 1/11 lb.; 9 lbs. @ 2/2 lb.
Ol. Peach Kernel (so-called), 1 cwt. @ 1/4 lb.; 56 lbs. @ 1/5 lb.; 9 lbs. @ 1/7 lb.
Ol. Pulegii B.P., 5 lbs. @ 6/6 lb.; 1 lb. @ 6/10.
Ol. Ricini Alb. Opt. Medicinal, 44 lbs. @ 90/- cwt.; 9 lbs. @ 11d. lb.; for export, 1 cwt. drums recommended.
Ol. Rosmarini, Coml., 28 lbs. @ 1/6 lb.; 9 lbs. @ 1/7 lb.; B.P., 9 lbs. @ 2/5 lb.; 1 lb. @ 2/9 lb.
Ol. Santal. Flav. Ang. B.P., 5 lbs. @ 31/6 lb.; 1 lb. @ 32/6 lb.
Ol. Sassafras, genuine, 28 lbs. @ 3/3 lb.; 1 lb. @ 3/8 lb.
Ol. Theobromæ, B.P., 8-oz. tabs., 28 lbs. @ 2/4 lb.; 7 lbs. @ 2/6 lb.
Ol. Wintergreen, Artificial, 5 lbs. @ 18/- lb.; 1 lb. @ 18/6 lb.
Oplum Turc. B.P., 14 lbs. @ 36/6 lb.; 3 lbs. @ 37/6 lb.; 1 lb. @ 38/6 lb.; powder, 6d. lb. extra.

*Minimum quantity at these prices; Home Trade, 3 Winchester Quarts assorted; Export, 12 Winchester Quarts assorted.

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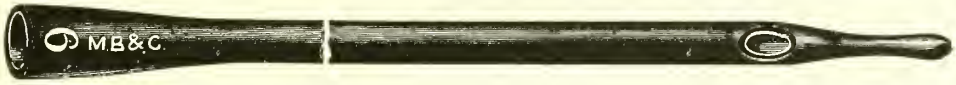

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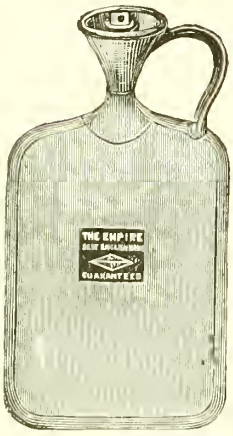

FIG. 957.—Side Handle.

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Heavy weight	each	3	3	3	6	3	10	4	1	4	5	5	1	5	4	5	9
Light ,, ...	,,	3	2	3	4	3	8	3	10	4	2	4	8	5	0	5	3
Cockburn's shape	,,	3	3	3	6	3	10	4	2	4	7	5	1	5	4	5	9
Covers, scarlet or grey plush	,,	0	9	0	9	0	11	0	11	1	1	1	2	1	3	1	6

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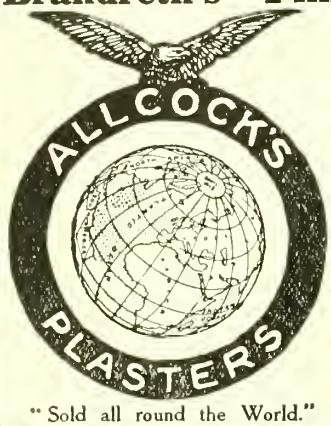

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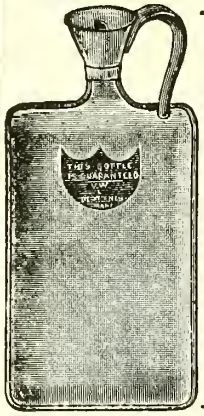

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GAMEKEEPERS recommend it. Pots 3d., 6d., & 1/-
THE RAT, MOLE, MOUSE & BEETLE POISON.
F. FARMER & CO., 1a College Lane, Homerton, LONDON, N.E.

PRECIPITATED CHALK.
Lightest and Whitest, also Purest Dense.
APPLY TO
AUG. LEVERMORE & CO. Ltd., 8-10 Gt. St. Helens, LONDON, E.C.
Telegrams: "LEVERMORE LONDON." Telephone: 4613 Central.

Precipitated Chalk, Hyposulphite of Soda, Sulphite of Soda, Glauber Salts, Epsom Salts, Salts of Tartar, Alum, Sulphite of Lime, Sulphide of Sodium.
E. BRAMWELL & SON, Ltd., ST. HELENS, LANC.

WILL VERNON & SONS
"Lister" Surgical Dressing Factory,
NORTH ROAD, PRESTON.
MANUFACTURERS OF
Absorbent Lint, Cotton Wool, Bandages, Wood Wool, etc.
Telegrams: "SPINDLES PRESTON."

RUBBER GOODS
(For ALL KINDS of SURGICAL)
Try JAMES TOMPKINS, LTD.,
Rubber Manufacturers, 386 CITY RD., LONDON.
ESTABLISHED 1877.

TO LET.

PHENACETIN.
CITRIC ACID.
FOR SPOT DELIVERY.
Harry Heymann, 5 Union Street, Bradford.

Van Horn and Sawtell
—LONDON AND NEW YORK— MAKERS OF
"K-Y" LUBRICATING JELLY
IN COLLAPSIBLE TUBES AND OF
"Van Horn" Sterile Sutures and Ligatures
IN GLASS TUBES — PRICES ON APPLICATION
81-83 HIGH HOLBORN, W.C.

First-Class Mechanical Dentistry.
Reliable workmanship. Popular Prices. Moderate charges for Gold, D.A., Tubes, Seamless Gold Crowns, Sections, Vulcanite, &c. Ash's and D.M. Co. Teeth and Rubber guaranteed. Punctuality strictly observed. List free. Trial case solicited. Gold and D.A. work a speciality. Special cheap rates for showcase pieces. 20 years' experience of first-class mechanical dentistry.
E. C. HALDER, 46 New Cross Road, LONDON, S.E.
'Phone, New Cross 1555.

PURE LIQUOR AMMONIA

WATER-WHITE, 880,

as supplied to the leading drug houses Packed in winchesters or iron drums. Special attention to export orders.

Also Carbonate of Ammonia, Disinfectants, &c.

Lewis Batley & Co., Chemical Works, Thongsbridge, Huddersfield (1)

ALEXANDRE'S

SHADEINE

FOR COLOURING GREY HAIR.

This popular article is largely advertised and stocked by all Wholesale Houses.

TRIAL BOTTLES 6d. size, supplied on pretty showcards, 4/6 doz.; 1/- size, 10/- doz.; 3/6 size, 30/- doz.

58 WESTBOURNE GROVE, LONDON, W.

We have now in Stock

DROP BOTTLES

L. H. and T. K. Patterns. 10, 15, 20, 30, 60 and 100 grm.

TELMA MANUFACTURING COMPANY,

Telma House, Red Lion Street, Clerkenwell Road, London, E.C.

S.V.M. WINES FOR CHEMISTS. S.V.R.

A. MACNAIR & Co. Dolphin Distillery, Ardwick, MANCHESTER

HERM. MADOERY, BASLE (Switzerland)

CHEMICAL WORKS FOUNDED 1902.

SWISS FIRM.

Specialities, Pharmaceutical Products:

Silver Salts — Quinine Salts

Vanillin 100% — Sulphothyol

Diethylbarbituric Acid — Albuminate Tannic

NOTICE OF REMOVAL.

HERBERT M. LONGCROFT

(Formerly 10 Whitecross St., London, E.C.)

has removed to more convenient offices at

16 CLERKENWELL ROAD, LONDON, E.C.

to which address please send all inquiries for

BOTTLES AND GLASSWARE. CAPPING GOODS. CHIP BOXES, &c.

Please refer to page 420, Diary, 1916.

RUBBER STAMPS

CHEMISTS' STAMPS, SEALS AND STENCILS A SPECIALITY.

D. D. RICHFORD, 8 & 9 Snow Hill, LONDON, E.C.

Full Illustrated Lists Free. Special Terms to Chemists.

INVESTIGATE

The Py-Shan Points Co-operative Sales plan—we think it will interest you. It has a regular weekly sale, gives 5d. per lb., profit, and sales are confined to chemists. Just a card for particulars now to

CHRISTYS, OLD SWAN LANE, E.C.

RENDELL'S

SOLUBLE QUININE PESSARIES.

THE WORLD-WIDE REPUTATION that these Pessaries have obtained since their invention by W. J. Rendell in 1885 has induced unscrupulous persons to place upon the market worthless and injurious compounds, with colourable imitations of W. J. Rendell's labels. To distinguish the genuine Pessaries from these fraudulent concoctions, see that the Registered Trade Mark and Number, in RED INK, are upon each box thus:

Registered Trade Mark, without which none are genuine. No. 182,688.

W. J. Rendell No. 182,688

Registered also in Australia, India, The Cape, The Argentine, Germany, &c.

IMPORTANT NOTICE AND CAUTION.

Several injunctions in the High Court of Justice having already been obtained (reports of which have appeared in "THE CHEMIST AND DRUGGIST"), W. J. RENDELL'S SOLICITORS are instructed to take proceedings against all persons (Makers or Vendors) fraudulently using the name of W. J. RENDELL," "RENDELL," or any colourable imitation thereof in connection with Pessaries NOT manufactured by

W. J. RENDELL,

INVENTOR AND SOLE MAKER,

16 CHADWELL STREET, CLERKENWELL, LONDON, E.C.

IMPORTANT.

NATURAL MINERAL WATERS.

We beg to inform the Trade that we are regularly receiving consignments of all Continental and other Natural Mineral Waters, **with the exception of those from Germany and Austria.**

We are thus in a position to fully execute orders for the leading well-known Natural Mineral Waters, as under:

VICHY-CÉLESTINS AND THE OTHER STATE SPRINGS (FRANCE)

AIX-LES-BAINS (France)
CHATEL-GUYON (France)
CONDAL (Spain)
CONTREXEVILLE-PAVILLON (France)
EVIAN-CACHAT (France)
FIUGGI (Italy)
INSALUS (Spain)
LA BOURBOULE (France)
MONTMIRAIL (France)
MONTREUX (Switzerland)
PELLEGRINO (Italy)
PERRIER (France)
POLAND (America)
RUBINAT-LLORACH (Spain)
ST. GALMIER (France)
SANGEMINI (Italy)
TANSAN (Japan)
VITTEL (France)
etc. etc.

Prices of the above quoted on application.

Showcards, Dummy Bottles and Pamphlets forwarded gratis, Carriage Paid.

Any Natural Mineral Water not in stock, if procurable, can be imported to special order during the season.

INGRAM & ROYLE, LTD.

Bangor Wharf, 45 Belvedere Road, London, S.E.

Telephone: HOP 4343 (2 lines). Telegrams: "INGRAM ROYLE, WATLOO, LONDON."

LIVERPOOL: 19 South John Street.

Telephone: BANK 4528. Telegrams: CELESTINS LIVERPOOL."

BRISTOL: Bath Bridge.

Telephone: 1113. Telegrams: "SPRUDEL BRISTOL."

THE CHEMIST & DRUGGIST SUPPLEMENT.

OFFICE: 42 CANNON STREET, E.C. SATURDAY, JANUARY 8, 1916.

TO ADVERTISERS IN THIS SUPPLEMENT.

The Publisher desires to make it clear that advertisements of Businesses for Disposal and Wanted, Situations Open and Wanted, Exchange Column, &c., **MUST BE PREPAID** (except in the case of serial advertisers), and to ensure prompt insertion

REMITTANCES MUST ACCOMPANY INSTRUCTIONS.

Advertisements for the current issue cannot be received after 4 p.m. on Thursday in each week. If it is necessary to telephone or telegraph an urgent announcement this may be done

PROVIDED the MONEY is TELEGRAPHED

at the same time and the fact made clear that the money order is to be delivered at 42 CANNON STREET, LONDON, E.C. Advertisers will assist greatly in the preparation and quick despatch of the Supplement by making careful note of these rules. Telephone: No. 3617 Central (3 lines). Telegraphic Address: "Chemicus Cannon London." (Three words counted as two.)

BEST RESULTS EVERY WEEK!

That is what advertisers in The Chemist and Druggist Supplement secure. Not indefinite returns from spasmodic and inflated circulation, but regular, steady success—the best possible in the Drug Trade. It gives

THE PUBLICITY IT PAYS TO PAY FOR.

CHEMISTS' TRANSFERS.

Messrs. ORRIDGE & CO., 56 Ludgate Hill, E.C.

Telephone Number: City 2283.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

1.—S.W. MAIN LINE (Few Miles Out).—Retail and Dispensing Business of good class, returning between £1,300 and £1,400, at good prices; moderate rent; held on lease; with house attached; excellent situation in centre of residential locality; valuation terms.

2.—LONDON, N.—Retail and Dispensing Business; returns between £1,700 and £1,800 per annum; *gross profit* 40 *per cent.*; price about £1,100; full investigation invited.

3.—CITY (Within Easy Distance of).—Price about £350, which is approximately the value of stock and fixtures; returns £900 to £1,000; *gross profit* 50 *per cent.*; double-fronted shop, corner position; rent £62; trams and 'buses pass the door; must sell at once.

4.—HAMPSTEAD.—Good-class Family Retail and Dispensing Business, with Photographic Sundries; returns £1,000, showing steady increase; handsomely fitted, double-fronted shop; price £400.

5.—KENT (Suburban).—Retail and Dispensing Business; returns £650; *net profit* £200; all open to full investigation; excellent residence; new lease; fully stocked and well fitted; terms, valuation without premium for goodwill.

6.—LONDON, S.E.—Cash Retail Business, chiefly ready money; established many years; returns, present rate, £20 weekly, *with net profit* £5; double-fronted shop; good stock; small residence; rent £32; price £400.

7.—HOME COUNTY (Market Town).—Good middle-class Retail and Dispensing Business, situate in residential district; returns about £1,000; very profitable and steadily increasing; valuation terms entertained.

8.—PARTNERSHIP.—A Partner required in very old-established Retail Business situate on the Coast; a gentleman with small capital would not be objected to; returns, including Branch, £2,500, with scope for extension.

9.—LANCS.—Ready-money Business, situate in working-class locality; returns last year £780; *net profit exceeds* £300; double-fronted shop; small house; rent £19 10*s.*; price £375.

10.—WILTS.—Old-established Business; has been neglected; present returns, under unqualified management, £1,000, which includes sales of Wines and Spirits; good-class locality; convenient house; valuation of stock and fixtures only required.

11.—YORKS.—Good middle-class Business, chiefly ready money; returns about £600; *net profit* £220; well-fitted shop, fully stocked; rent £25, which includes residence; price £400.

12.—SURREY HILLS (Charming Locality).—Family Retail and Dispensing Business; returns, present rate, £2,000 per annum, at good prices; steadily increasing; terms, goodwill £125, stock and fixtures at valuation.

13.—NORTH OF ENGLAND (Manufacturing Town).—Good-class Retail and Dispensing Business (N.H.I.), returning £1,050, *with net profit* £350; rent £19 10*s.*; small residence; price £650, about the value of stock and fixtures.

14.—GLAMORGANSHIRE.—Price £325, £175 on entry and balance by instalments; Light Retail and Dispensing (N.H.I.); returns £700; *estimated net profit* £200; rent only £40, including 7-roomed house and double-fronted shop.

VALUATIONS FOR STOCKTAKING.

Messrs. O. & Co. desire to emphasize the necessity of a Periodical Statement of Account, by which means alone **Profit, the value of Business, &c.**, can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted, and eventually becomes the cause of **confusion and loss.**

Messrs. O. & Co. are prepared to undertake these essential duties, and will make **Special Terms** for such services.

ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.

BRETT & CO.

Licensed Valuers,

73 LAUREL ROAD, LEICESTER.

Telegrams, "Brett Leicester." Telephone 1934.

F. J. BRETT, M.P.S.,

GIVES PERSONAL ATTENTION TO ALL VALUATIONS.

NO CHARGE TO BUYERS.

AGENCY.—We have always a large number of *Buyers* on our books, and we can frequently find a purchaser at once. We also have a *Private Register* for vendors who are in no hurry to sell, and who do not wish their businesses to be advertised.

STOCKTAKING SPECIALISTS to the Entire DRUG TRADE.

£1,100 returns.—WILTS.—General Country Retail, with Wine and Spirit licence; nice market town; valuation about £400.

£450 returns.—MANCHESTER DISTRICT.—Valuation about £250.

£1,100 returns.—YORKSHIRE.—Good-class Retail, in best position of manufacturing town; valuation £500 to £600; or Partner would be accepted, as owner wishes to join the Army.

£1,500 returns.—LANCASHIRE.—General Mixed trade, at good prices; low rent; price about £500.

£800 returns.—SURREY.—Light Retail, in nice country town; plenty of scope for Optics or Dentistry.

£1,400 returns.—High-class Retail and Dispensing in Northern Inland Spa; the town is healthy, popular, and prosperous; price about £1,200.

We are fully booked up for stock takings for January.

Valuations conducted upon the shortest notice at moderate fees.

PARSON C. BAKER

1 MOUNTFIELD ROAD, CHURCH END, FINCHLEY, N.

Recommended by— BRITISH DRUG HOUSES, LTD. MEGGESON & CO., LTD. BARCLAY & SON, LTD.

Tel. No. Finchley 812.

All correspondence should be addressed as above.

And at 174 VICTORIA ST., S.W., Ph.C. Tel. No. Victoria 27.

Valuer to Association of Manufacturing Chemists, has Businesses for Disposal on East, South, and West Coasts, besides numerous others in various parts of the country.

Several Pharmacists are disposing of very desirable concerns that they may be able to join the Forces abroad. Purchasers are requested to send particulars of their requirements and the amount of capital they are willing to invest. No charge whatever to purchasers.

P. C. B. makes a speciality of examinations and reports on businesses on behalf of purchasers and arranges the transfer on very moderate terms.

Valuations for Sale, Probate, or Account are promptly attended to and personally conducted, whether in town or country. All communications are strictly confidential, and correspondence is invited.

Purchasers are strongly advised not to purchase any business which is not allowed to be investigated by an experienced expert.

THOS. TOMLINSON & SON

CHEMISTS' VALUERS, TRANSFER AGENTS, AND EXPERT STOCKTAKERS,

45a MARKET STREET, MANCHESTER.

ESTABLISHED OVER HALF A CENTURY.

Telegraphic Address: "Tomtom."

Price-lists, trade circulars, samples, and printed matter can in no case be forwarded, the Box numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communications received which he may consider contrary to this rule.

BERDOE & FISH

VALUERS & TRANSFER AGENTS,

35 Jewry Street, Fenchurch Street, City.

Telephone: 1809 CENTRAL.

NO CHARGE TO PURCHASERS.

1.—EASTERN COUNTY.—Good-class Cash Retail, with Wines and Spirits; returning between £3,500 and £4,000, with plenty of scope for further extension; splendid position; very heavily stocked; illness sole cause of selling; price required £2,000; strongly recommended.

2.—ISLE OF WIGHT.—Through sudden death of Manager, sound old-established Country Seaside Business; no opposition; scope for increase; price, including freehold, £700; further particulars on application.

3.—HOME COUNTY (Fashionable Town).—First-class Dispensing and Retail Business; returning over £1,200; half profit; can be much increased; stands well; price £700, or £100 and valuation; personally inspected and recommended.

4.—SOUTH-WEST OF ENGLAND.—Old-established unopposed Country Chemist's Business; returning £1,200, and producing clear net profit of £300; large house and garden; heavily stocked; owner joining Army; will accept £700, bare valuation.

5.—LONDON, S.W. (Busy Main Road).—Good medium-class Retail, increasing; returns £1,500; low rent, fine corner shop; stock and fixtures worth £1,000; price £800; owner on active service.

6.—SURREY (Suburb).—Good-class Light Family Retail, pleasantly situated; returns £1,450; good profits; attractive Pharmacy, fully stocked; price £850, or valuation terms; books properly kept.

7.—LONDON, S.W. (Few Miles Out).—Good middle-class Business, entirely under manger; returns over £700; plenty of scope; good position; well stocked; price £275.

STOCKTAKING v. INCOME TAX.

Every chemist should make a point of reading page 135 in *C. & D. Diary*, which deals with the above matter, and then write for our special pamphlet and low terms. *Forty-five years' practical experience.*

BUSINESSES FOR DISPOSAL.

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

The **Advertiser** may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of **6d.**

BRADFORD.—Old-established Light Retail Drug Business for Disposal at once; main thoroughfare, near Town Hall; reason, age; good opening for Panel. Particulars from "S. H.," 113 Bridge Street, Bradford.

LONDON.—Genuine little Business, Drug Stores; busy part; well fitted; comfortable house, 5 rooms; owner made good living past 2½ years; enlisting; expenses extremely moderate; no reasonable offer refused. 162/2, Office of this Paper.

LONDON, S.W.—Lock-up Branch for immediate Disposal; takings under neglect £6 per week; could be greatly increased; a large Panel business could be done (at present it is refused); willing to accept less than valuation; suit elderly man; a good opening for Dentistry and Photography; every convenience. Address cash offer, 162/31, Office of this Paper.

LONDON, S.W. (Main Market Thoroughfare).—Cash Retail Business, much neglected and let down owing to serious illness, but capable of increase under young, energetic management; every investigation; will accept £100 or consider an offer. 88/53, Office of this Paper.

LONDON, W. and S.W.—Advertiser, wishing to join the Colours, has two Businesses for immediate Disposal: No. 1, West End, rent 30s. weekly, no rates and taxes; price £100 (less than valuation); No. 2, suburban, on main road; old-established, with several valuable Proprietaries; long lease; price £450; valuation of stock and fixtures £700. Apply, "Pyke" (89/5), Office of this Paper.

MANCHESTER.—Pharmacy; populous suburb; splendid corner premises; modern roomy house, private entrance; specially suitable for Dentistry; three large cellars, with shed; lease; opportunity for N.H.I.; average cash turnover three years £600 (no Dentistry or Panel); business recently worked by unqualified junior; stock and fixtures taken at £450; price £450. 163/20, Office of this Paper.

YORKSHIRE, W.R.—A good-class Retail and Dispensing (not N.H.I.) Business for Sale; returns about £1,100; good position and healthy locality; shop of good appearance and well stocked; satisfactory reasons for sale. Apply, 163/2, Office of this Paper.

AGRICULTURAL Market Town.—Population 16,000, with large outlying district; nearest town 12 miles; good premises now vacant; Proprietary rights of locally well-known preparations and some Fixtures and Utensils for sale. Apply, 160/1, Office of this Paper.

BOTTLES.—Small Glass-bottle Works for Sale, London district, with Four-pot Furnace Cooling Oven, etc., complete; low price for quick sale; good stock of Raw Materials, Blowing Irons, Moulds, etc.; experienced Glass Maker and Melter supplied if desired. Write, 153/39, Office of this Paper.

RETIRING from the Trade.—An opportunity occurs to acquire an established, progressive Business in growing working-class market; returning over £2,500 under management; net profits £750; book kept by chartered accountant; stock taken annually; long lease at low rental, £60, worth £90; heavily stocked; good modern fixtures; business never changed hands; accept £1,250 for quick purchase; trial could be arranged. 163/34, Office of this Paper.

SALE or amalgamation, a Surgical Dressings and Druggists' Sundries Business; London. Apply to 87/39, Office of this Paper.

TO Chemists and Dentists.—Exceptional opportunity for business man to acquire sound Chemist's Business in good-class neighbourhood; ample scope, and arranged for Dental department; well-fitted shop; dry cellar; side and back entrance; good house accommodation; electric light; capital required very small; rent £55. Letter, "E. B.," 76 Upper Tulse Hill.

£125.—Modern Cash Pharmacy, a few miles from Manchester; under proprietor could do £15 weekly; proprietor about to join the Army; a great bargain. Apply, 81/65, Office of this Paper.

£50.—London, N.—Through illness; must sell; big scope, qualified or unqualified; opening for Dentistry or Optics; well worth investigating; stock and fixtures worth much more. 165/38, Office of this Paper.

£45 quick buyer; Country Drug Stores, Essex, 40 miles from Liverpool Street; rent and taxes 9s. weekly; large house, stables, garden; net profits 30s.; nearest qualified Chemist 4 miles; population 2,000; 3 Doctors; first caller will get bargain. "Rhei" (163/26), Office of this Paper.

AGENCIES.

MILAN (Italy).—Agent, having best Italian clientèle, wishes to Represent important English Manufacturer of Chemicals for industry and Pharmacy; first-class references given and required. Inquiries and particulars, in first instance, through R. J. Cobbett, 35 Jewin Crescent, London, E.C.

ADVERTISER, returning to India immediately, visiting all principal towns, desires one or two more Agencies on commission only; 7 years' experience of Indian markets. 87/37, Office of this Paper.

BELGIAN Pharmacist, well connected in Belgium, wishes to arrange for the Representation of an English firm after the war, in Pharmaceutical products and Drugs; best references; interview in London. Mr. Jules Tossins, 19 Fullerton Road, Wandsworth, S.W.

GENTLEMAN (ineligible), live connection amongst Chemists in Ireland, desires Agency leading British firm or Manufacturer; part expenses and commission; highest credentials. 152/10, Office of this Paper.

QUALIFIED Chemist (Spaniard), writing English and French, with London and Paris Pharmacy experience, residing Madrid, calling already for one Proprietary Medicine on Doctors and Chemists in Spain, is open to Represent another Pharmaceutical firm in Spain; London references. 89/7, Office of this Paper.

PREMISES WANTED.

CHEMIST wants Premises in or near good provincial town where there is an opening for Dentistry. "Dens" (150/20), Office of this Paper.

BUSINESSES WANTED.

ADVERTISER is open to Purchase a General Retail Business; small or neglected not objected to if plenty of scope; only essential, good house attached, and decent neighbourhood; opening for Optics an advantage. Full particulars and price to "Genuine" (158/16), Office of this Paper.

ADVERTISER wishes to purchase immediately Business with a fairly large turnover, or smaller Business considered if unopposed Country Business; Mixed Business not objected to; distance no object. Full particulars as to rent, rates, house, and lowest price for cash, and if valuation accepted, Jessop, 4 Nightingale Terrace, Benhill Avenue, Sutton, Surrey.

BUSINESS wanted, London or suburbs; returns from £800 to £1,200. Full particulars, in confidence, to "Pharmacist" (163/9), Office of this Paper.

CHEMIST, with small capital, wishes to Purchase Country Business in West or South-Western Counties. Full particulars as to rent, rates, shop, house, takings, net profits, etc., and lowest price (Cash business preferred), to 158/30, Office of this Paper.

SMALL Business that can be run as Drug Store, with good living accommodation; North London preferred. Apply, "Aspirin" (165/32), Office of this Paper.

FOR SALE.

CHEMIST'S SHOPFITTINGS (SECOND-HAND).—Ranges of Drug Drawers, Shelving, Dispensing Screens, Counters, Perfumery Desks, Showcases, Silent Salesmen Cases, 4 complete gross sets of Shop-rounds, Wall Cases, etc., etc. D. Matthews & Son, 14 and 16 Manchester Street, Liverpool.

NATIONAL Cash Register, second-hand, for Sale; keys to £2; Ticket-printer and Total-adder. Write, "G. R. P.," 61 Park Road, Teddington.

PARTNERSHIPS.

QUALIFIED Chemist, middle-aged, wishes to Buy good established Business or Partnership in a good Wholesale or Retail Business, or would Purchase for cash whole or part share in well-established Proprietary or Mail-order business; highest references; cash ready. 160/8, Office of this Paper.

SITUATIONS OPEN.

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

RETAIL.

ALDERSHOT.—An unqualified Assistant. State particulars, with salary (outdoors), to Williams & Litchfield, Pharmacists.

ASHTON-UNDER-LYNE.—Wanted, unqualified Assistant or Junior; must be smart; no Sunday or Tuesday duty. State age, experience, and salary required, and enclose photo (to be returned), to 158/31, Office of this Paper.

BATH.—Unqualified Assistant for Drug department; short hours; no Sunday duty; high-class Dispensing and Counter work. State salary and full particulars to Cater, Stoffell & Fortt, Ltd., Bath.

BELVEDERE, Kent.—Reliable qualified Chemist required for good-class business to assist with Management; short hours; good Extractor preferred. Please forward full particulars as to age, salary, reference, etc., also photo (if convenient), Knowles & Co.

BIRMINGHAM.—Unqualified Assistant wanted; Light Retail. Usual particulars to Atkinson, Chemist, Six Ways, Birmingham.

BIRMINGHAM.—Unqualified Assistant, age about 45, for first-class business; must be a good Counterman and Dispenser; good salary offered to a capable man. "XL." (159/320), Office of this Paper.

BIRMINGHAM.—Assistant wanted; outdoors; Counter, Dispensing, Window-dressing; hours 8.30 to 7.30; no Sunday duty; wages 35s. per week; please send photo. Apply, Mr. Wakefield, Messrs. Bellamy & Wakefield, Pharmaceutical Chemists, Easy Row, Birmingham.

BLANDFORD.—Wanted (immediately), an Assistant (not eligible for military service) for Retail and Dispensing; reliable, good references, and sober. Send photo (to be returned), to H. Richards, Chemist, Blandford, Dorset.

BRIGHTON.—Assistant (gentlemanly); comfortable berth for good all-round man; Photography; capable taking charge of good-class business; good flat probably provided later if permanent. State age, send photo and full particulars first letter; also good Junior; Frenchman not objected to. Sidney Lane, 100 Western Road, Hove.

CHELTENHAM.—Junior Assistant or Improver (indoors, one only kept), for Light Retail, Dispensing, and Photographic business; no Extracting required. In reply please state age, height, experience, reference, and salary rquired, with photo (if convenient), to Arthur Hill, Chemist and Dentist, 98 High Street, Cheltenham.

CLIFTON, Bristol.—Qualified Dispenser; indoors; close 7.30. Wednesdays 1 o'clock; no evening duty. Apply, stating age, experience, and salary required, to Giles, Schacht & Co.

EASTBOURNE.—Wanted, Junior Assistant for beginning of February; experienced to good-class Dispensing business; no Panel work; furnished room provided. Photo and full particulars to J. G. Gould & Co., 1 Victoria Place, Eastbourne.

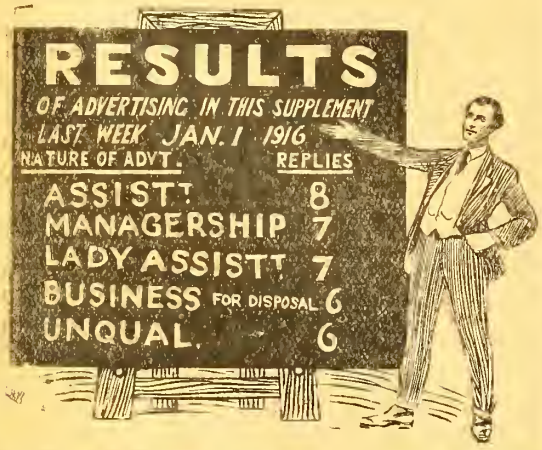
EXETER.—Wanted (February 3), good Junior; efficient Dispenser, Counterman, and Stockkeeper. Apply, stating age, experience, and salary required (outdoors), to Mr. Reid, Queen Street, Exeter.

GRAVESEND.—Wanted, an experienced Assistant; qualified or otherwise; age about 40; ineligible for Army; outdoors; Light Retail and Dispensing business; easy hours; no National Insurance work. Apply, stating age, height, references, salary, etc., to R. T. Clarke, 131 Milton Road, Gravesend. Applications not answered in two days declined.

HERNE HILL, S.E.—At once, smart Junior, with knowledge of Photography and Dispensing; outdoors. G. W. G. Robinson, M.P.S., 307 Railton Road, Herne Hill, S.E.

LONDON, N.—An Assistant, with experience of N.H.I. Dispensing; also a Junior or Improver (one just out of Apprenticeship not objected to). Apply, letter only, giving full particulars as to experience, names of references, when disengaged, and salary expected (in- or out-doors), "Chemist," 300 Amhurst Road, Stoke Newington, N.

LONDON, S.E.—Unqualified Assistant, to live on premises, for middle of February; must be good Prescriber, Salesman, and Window-dresser; if with some experience in Dentistry preferred; there is a good house, comfortable and permanent situation for industrious and obliging man. Apply, with full particulars, references, and salary, "L. L." (162/18), Office of this Paper.



This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of Advertisers who use a number or nom de plume.

LONDON, N.—Assistant wanted for Counter; whole day off one week and half-day the next week alternately; salary and commission, 50s. per week (minimum). State age, experience, references, and when disengaged, in first letter, or apply personally, Bishop & Vincent, 460 Holloway Road, London, N.

LONDON, S.E.—Thoroughly competent qualified gentleman (ineligible for Army) required for a first-class Retail and Dispensing business; no N.H.I.; in good suburb; must be tactful, obliging, good Counterman and Dispenser, and have had a good business training; possibly required to act as Manager later on in absence of principal; good terms to a really competent man; to commence duties by middle of February. Fullest particulars to "Ashville" (163/12), Office of this Paper.

LONDON, S.W.—Required, female Assistant of ladylike appearance, tall, for Counter; one accustomed to Chemist Retail. Write, "L. J.," 2282, Sells' Advertising Offices, Fleet St., E.C.

LONDON, S.W.—Wanted (soon), an outdoor Junior or Part-time Assistant; near several Schools of Pharmacy. Apply, with usual particulars, enclosing photo, or call personally, Banbury, 186 Lavender Hill, S.W.

LONDON, S.W.—Wanted, in a large West-End establishment, Assistants for Counter; male or female. Write, stating full particulars of experience, to "L. J.," 2314, Sells' Advertising Offices, Fleet Street, E.C.

LONDON, W.C.—Assistant (qualified or unqualified) wanted immediately, chiefly for Dispensing; highest references essential. Apply, R. S. Starkie, 7 Grand Hotel Buildings, Trafalgar Square.

LONDON, W.—Unqualified Assistant wanted, well up in Dispensing and able to Extract; duties light; outdoors. State salary and full particulars to "Pharmacist" (166/12), Office of this Paper.

MANCHESTER Children's Hospital, Pendlebury, and Gartside Street, Manchester.—Qualified Assistant Dispenser required for the duration of the war; ladies with previous Hospital experience eligible; salary £75. Applications, accompanied by copies of two recent testimonials, to be sent to the Secretary, from whom further particulars may be obtained if desired.

N.E. LANCS.—Qualified Assistant wanted; hours and duties light; every opportunity to learn Dentistry; would suit newly qualified; must be smart in appearance and quick at Counter and Dispensing; permanency. 166/20, Office of this Paper.

SOUTH COAST.—Qualified Chemist wanted to take charge of Pharmacy department; good Window-dresser; knowledge of Optics preferred; easy hours. State experience and salary required to "J." (158/7), Office of this Paper.

SOUTH KENSINGTON.—Good Dispenser and Counterman wanted; outdoors; no N.H.I. Apply, Holt Green & Co., South Kensington Station, S.W.

SOUTH OF ENGLAND.—Assistant required; experienced; permanency, with good salary. Timothy White Co., Ltd., Chemists, Portsmouth.

SOUTHPORT.—Manager for Branch, with good-class Retail and Dispensing experience; must be well recommended. Age, references, salary required (outdoors), and full particulars to J. R. Cave, Ltd., 52 Nevill Street, Southport.

WHITCHURCH.—Wanted, for end of January or earlier, good Junior, ineligible for Army, for good-class Retail and Dispensing; sleep out; dinner and tea provided on weekdays; hours short, viz., 55½ per week; no Sunday duty. State full particulars and salary required to Morgan & Sons, Chemists, Whitchurch, Salop.

WOKING.—Wanted (immediately), good Dispenser; National Insurance and Family Dispensing; a good salary offered to capable person; must be ineligible for military service. Full particulars to J. Wearing, The Central Pharmacy, Woking.

WORTHING.—Assistant wanted; outdoors; lady or gentleman; good-class business. Send particulars, with references, to W. Aston, Pharmaceutical Chemist, Worthing.

WORTHING.—Dispenser (lady) wanted; one who has had experience at the Dispensing Counter of a Chemist preferred; good opportunity to acquire thorough Dispensing knowledge; berth outdoors. Please give all particulars, age, salary, etc., in first letter, to H. Reynolds, Pharmacist, Broadway, West Worthing.

YORKSHIRE (West Riding).—Qualified Manager required for progressive Cash business; must be about 45 years of age and be capable and energetic; permanency; interest in the profits offered. "Yorks" (162/14), Office of this Paper.

A QUALIFIED Dispenser wanted. Apply, stating age, experience, references, and salary required, to Secretary, G.W.R. Medical Fund Society, Swindon, Wilts.

A RELIABLE Assistant wanted in a good-class Country Retail; a comfortable berth; outdoors; easy hours. Apply, giving usual particulars and naming references, to Benjamin, Chemist, Ross-on-Wye.

ASSISTANT; married; qualification not essential; practical Photographer is essential; easy hours; comfortable berth. Send photo, Walwin, Chemist, Gloucester.

ASSISTANT, unqualified, wanted soon; permanency; good Window-dresser and capable of taking charge; London district, West. State full particulars in first letter to 88/57, Office of this Paper.

BRANCH Manager (Pharmacist) required immediately; good salary and commission to one with enterprise, energy, and initiative; knowledge of Photography and good Window-dressing essential; references must bear the strictest investigation. Apply, with fullest particulars, to Parke's Drug Stores, Ltd., 65 Harmood Street, N.W.

BRANCH Managing Assistant; London suburb; unqualified; permanency; must be good Counterman with business methods; plenty of scope for man with ideas and brains. In first reply state age, last few years' experience, and salary, to Mr. Johnson (162/9), Office of this Paper.

DISPENSER and Bookkeeper wanted by firm of Doctors in South Coast town; preferably qualified; live out. Send photo, state wages, age, experience, 158/17, Office of this Paper.

ELDERLY qualified Assistant required, mostly for N.H.I. Dispensing; comfortable permanency; easy hours. State when at liberty and salary required, 159/32, Office of this Paper.

JUNIOR unqualified Assistant for West-End house, or one just out of Apprenticeship; easy berth; good wages. 166/11, Office of this Paper.

LADY Dispenser wanted by a Medical man in Stockport district. Apply, stating age, qualification, previous experience, and wages required, to "ST.," c/o J. C. Arnfield & Sons, Ltd., Stockport.

LADY Dispenser wanted; live out; Minor or Apothecaries' Hall. Write, stating age, experience, salary required, etc., enclosing references or testimonials, to Dr. G. A. E. Roberts, Twyford, Hants.

LADY Assistant or non-eligible male for North London suburb; live in; comfortable home; time off daily and weekly half-holiday. J. S. Jenkin, Chemist and Optician, 352 High Road, Wood Green, N.

LOCUM wanted from January 16 for one week or more. State terms, etc., to Sidney Smith, Chemist, Uckfield.

MANAGER, with view to purchase or Partnership; progressive N. London business; moderate hours; salary £3 5s. outdoors, or £3 and rooms over premises; another Assistant kept; easy terms arranged for purchase. 163/340, Office of this Paper.

MANAGER (qualified) wanted for good-class Stores business in West End; must be good Window-dresser, smart appearance and address, good Salesman, able to take entire charge; good salary and substantial commission on net profits; applications treated in confidence. State age, height, when disengaged, salary required, experience, and full particulars, to "S." (163/380), Office of this Paper.

MESSRS. RANSFORD & CUNNINGHAM, Folkestone, require an Assistant (outdoors) about January 24, for high-class Light Retail and Dispensing business. Photo and usual particulars as to salary, references, etc., 36 Sandgate Road, Folkestone.

MESSRS. TIMOTHY WHITE CO., LTD., Chemists, Portsmouth, require a capable Pharmacist as Manager; easy hours; good and progressive salary, with excellent prospects.

QUALIFIED lady to Manage a Branch; high-class Retail and Dispensing; health resort, West of England; good Dispensing and Counter experience essential; hours easy; no Sunday duty; salary and commission about £3 weekly. Full particulars to 150/16, Office of this Paper.

QUALIFIED Assistant wanted, capable and energetic; hours, Monday, Tuesday, Wednesday 9-9.30, Thursday, 9-1, Friday 9-10, Saturday 9-11; also Sunday man for Relief duty wanted, 6-9.30. Apply, J. Edmunds & Co., Ltd., 33 High Street, Kingsland, London.

QUALIFIED Assistant required for quick Cash business in London; good salary to suitable man. State age, salary required, and particulars of experience to 88/31, Office of this Paper.

QUALIFIED man, married, active, middle-aged or elderly preferred, to take charge of good-class Retail and Dispensing business; outdoors; proprietor enlisting; fair salary to suitable man; pleasant country district 25 miles from town. Apply, in first instnce, 162/29, Office of this Paper.

QUALIFIED (elderly) wanted, a gentleman wishing to take things easy, for good-class West-End business; hours 11 to 2 p.m. and 4 to 6 p.m., half-day weekly; salary 25s.; permanency. Give full particulars age, experience, when disengaged, 163/38, Office of this Paper.

UNQUALIFIED Assistant to Manage Branch in Wolverhampton; new dwelling-house attached, rent, rates, and gas free; unqualified lady Assistant, who must have had Counter experience, required for Preston. Applicants for either position must supply full particulars of experience and state age and salary required, Martyn's Stores, Ltd., Queen Street, Wolverhampton.

UNQUALIFIED Assistant with good all-round experience required for suburban London shop; one with knowledge of Photographic preferred. State usual and full particulars, in confidence, to 88/310, Office of this Paper.

WANTED, unqualified Assistant for Speciality and Prescribing business; permanent and progressive; outdoors. State age, also salary expected, Hulme, Chemist, Nottingham.

WANTED, smart unqualified man able to Manage and take full control; must be smart Window-dresser, good Salesman, and have initiative; applications treated in confidence. State height, experience, salary required, when disengaged, good salary and substantial commission on profits, to "Chemist," 30 Highdown Road, Hove.

WANTED, Junior Assistant, accustomed to good-class Dispensing; in- or out-doors. W. McEwen, 17 Craven Road, Hyde Park, London, W.

WANTED immediately, a competent and thoroughly reliable Assistant for high-class West-End business; unqualified; outdoors; must be a neat and accurate Dispenser and good Counterman; age about 25. Apply, stating salary required and usual particulars, to J. G. Shirley & Son, 60 Westbourne Grove, W.

WANTED, smart Assistant for large Photographic Chemist's business; some experience required. Write, stating salary required, and enclose photograph; easy hours, permanent position, and good prospects. Watson's, 84 High Street, Sheffield.

YOUNG lady Assistant wanted in Chemist's shop in South Wales; live out; able to do a little Dispensing. Apply, 159/36, Office of this Paper.

WHOLESALE.

ABERDEEN and District.—Drug Traveller wanted. State age, experience, and salary required, 88/55, Office of this Paper.

SCOTLAND.—Wanted, Drug Traveller; ineligible for military service. Full details, 88/550, Office of this Paper.

CLERK required, experienced in Shipping, by Wholesale Druggists, London, South; good salary to capable man. Write full particulars, stating age and salary required, to 88/70, Office of this Paper.

DRUGGISTS' Sundries.—Invoice Clerk required for Wholesale house; either sex; male applicants must be ineligible for military service. Apply, giving full particulars and salary required, to 165/33, Office of this Paper.

FOREWOMAN Packer for Toilet Goods and Chemists' Specialities for London; good wages offered to experienced woman. Replies, in confidence, 86/35, Office of this Paper.

INSTRUMENTS.—Wanted, a gentleman to Manage the Instrument Department of a Wholesale house in the provinces; must be capable of measuring and fitting Artificial Limbs and Orthopædic Appliances, and also have a thorough knowledge of the Management of the Instrument business. Apply, giving fullest particulars as to experience, salary required, etc., 80/4, Office of this Paper.

INVOICE Clerk (second), male or female, required by Brook, Parker & Co., Ltd., Manufacturing Chemists, Bradford; would suit elderly man with Retail experience wishing to get into Wholesale. Write fullest particulars, salary, experience, etc.

LABORATORY.—Chief Assistant wanted in a small but rapidly increasing London Drug business, to take charge under the Chemist (qualified Assistants can apply); a thoroughly competent man of good character and ability will be liberally dealt with; the position is one of marked importance to one who can adapt himself and take interest in the business. Apply, "Eupad" (88/47), Office of this Paper.

MANUFACTURERS of Perfumery, Eau de Cologne, and Toilet Requisites require, immediately, Representative for London and district as far as Southampton. Apply, with full particulars, 86/171, Office of this Paper.

MINOR man wanted for Checking. Timothy White Co., Ltd., Wholesale Druggists, Portsmouth.

REPRESENTATIVE wanted, on commission, for sale of Epsom and Glauber Salts. Reply, in confidence, who at present representing, and ground covered, to 82/47, Office of this Paper.

REPRESENTATIVE.—Smart and energetic man wanted to solicit Chemists, Drug Stores, etc., in the London district. Write full particulars of age, experience, and salary required to "T. R." (166/2), Office of this Paper.

TRAVELLER wanted for Birmingham district, to call on Chemists; must be experienced and understand trade; salary, expenses, and commission. Apply, by letter only, stating full particulars and references, to Chas. C. Williams, Ltd., 281-283 Broad Street, Birmingham.

TRAVELLER, accustomed to call upon Chemists in South-West of England and Wales, required to Represent Manufacturing Perfumery and Toilet House. Full particulars, 86/17, Office of this Paper.

WANTED at once, by a Wholesale firm, a competent Packer and Wet Cellarman. State wages and experience, 166/26, Office of this Paper.

YOUNG woman wanted for putting up stock. Apply, Bishop & Vincent, 460 Holloway Road, N.

SITUATIONS OPEN.

(Colonial, Indian and Foreign.)

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid. The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

AUSTRALIA.—Gentleman already representing other firms in Australia required to Represent a Perfumery house of standing, on commission; must have established connection amongst buyers of Perfumery and Toilet Soaps; also one for India for next season. Apply, 152/16, Office of this Paper.

SITUATIONS WANTED.

1s. for 12 words or less; 6d. for every 10 words or less beyond, prepaid.

The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

[HOME.]
RETAIL.

A PHARMACIST (26), of excellent experience and undeniable references, desires Management of good-class Pharmacy; permanency preferred. 159/37, Office of this Paper.

A REFINED young lady requires post as Improver in either Blackpool, Lytham, or St. Anne's. Apply, "Bismuth," 16 Balmoral Road, Blackpool.

AS Junior Dispenser-Assistant, situation wanted. W. Stober, 28 Harlow Moor Drive, Harrogate.

ASSISTANT (23), ineligible, wants evening Counter work or Dispensing in London. 160/3, Office of this Paper.

ASSISTANT; 43; 5 ft. 10 in.; capable Dispenser, Counter, etc.; unqualified; at liberty shortly. "J. G.," 16 Thomas Street, Stretford, Manchester.

ASSISTANT; 33; tall; gentlemanly; ability and integrity unquestioned; City or West End preferred; ineligible for Army; disengaged. Oakley, 18 Canonbury Square, N.

ASSISTANT or Drug Stores Manager; over 30 years' Retail experience, part Wholesale; age 56; within 50 miles of Manchester; Extractor, Optics, etc. 162/16, Office of this Paper.

CAPABLE man seeks change; ineligible; large Store trade, Counter, or Orders; 15 years' Stores experience. "R. T.," 122 Northcote Road, Wandsworth Common.

CHEMIST'S daughter (17½) requires situation as Junior or Improver; 3 years' good all-round experience; fair Dispenser; time for study. "Salicin" (162/20), Office of this Paper.

COMPETENT reliable Locum, Manager or Assistant Manager; qualified; 45; married; Store, Photographic, and West-End experience. "Nemo," 78 Standen Road, Southfields, S.W.

COMPETENT, reliable, steady Managing Assistant, used to keen Store trading and high-class business; good salary expected for conscientious services; disengaged; unqualified; ineligible; smart, active, up to date. "Browne," 286 Kingsland Road, N.

DISPENSING, Bookkeeping, etc., wanted; Part-time; qualified; Doctor or Institution. Miss A. Bull, 13 Prospect Place, Trowbridge.

ELDERLY, active; Temporary or Branch; moderate hours; near London, North preferred; has furniture. "P.," 56 Holdsworthy Square, Gray's Inn Road, W.C.

EVENING Relief work; London, W.; free from 6 o'clock, also Saturday afternoon and Sunday; competent Assistant; 34; used to sole charge; no 1s. an hour entertained. "Radix" (162/8), Office of this Paper.

EXPERIENCED Pricing Clerk seeks appointment; age 33; excellent references. 156/33, Office of this Paper.

FIVE evenings weekly disengaged 6 p.m.; Counter or Dispensing; London, W., or Ealing district preferred; highest references. 166/24, Office of this Paper.

GRIMSBY or District.—Minor student desires post for February and March, 3 hours daily. Full particulars to Lord, 26 Neville Street, Norwich.

IMPROVER; 3 years' experience. D. E. Williams, 21 Gwendraeth Town, Kidwelly.

INELIGIBLE Minor student requires Part-time berth; previous London experience. 166/28, Office of this Paper.

IRISH Pharmacist (qualified), 25, unfit for military service, seeks engagement as Manager or Senior in first-class establishment; unique experience in all branches; accustomed to over 200 private Prescriptions daily; excellent Retail experience; correspondence invited from high-class house only. "M.P.S.I." (162/7), Office of this Paper.

LADY Dispenser (Clergyman's widow), Hall qualification, desires post, Hospital or with Doctor; London or Manchester area preferred; Locum or permanency. Mrs. Calvert, Roseleigh, Longcroft Avenue, Harpenden.

LADY (qualified) requires permanent post; London district. "G. C.," 15 Charles Square, Kensington.

LADY Dispenser (qualified), experienced, desires post in Institution or with Doctor in London or S.E. or S.W. suburb. "E. C.," 94 Herne Hill, S.E.

LADY Dispenser, qualified, experienced, desires post with Doctor in London or N. or N.W. suburb; free now; good testimonials. Miss Barr, Wakefield, Ballard's Lane, N. Finchley.

LADY Dispenser (Hall qualification) desires post with Doctor or Chemist; London preferred. B. Lewis, 38 Orlando Road, Clapham.

LADY Assistant, 8 years' Retail experience, disengaged. Apply, 166/9, Office of this Paper.

LIVERPOOL or District.—Smart qualified man requires situation; 41; excellent references. State terms (outdoors), hours, "R. P.," 271 Gidlow Lane, Wigan.

LOCUM, few weeks; London or near preferred; qualified; first-class experience. 166/25, Office of this Paper.

MANAGER or Assistant; qualified; Locum, permanency; first-class Retail and Store experience; ineligible for military service. "A.," 5 Holmwood Road, Brixton Hill.

MANAGER or Locum; elderly, active; best varied experience; preference for Manchester or district, but not essential. "F. B.," 32 Wright Street, C.-on-M., Manchester.

MANAGER or Senior in high-class English and Foreign Pharmacy; Minor; ineligible; several Formulæ splendid selling and paying French specialities; mutual terms. 159/19, Office of this Paper.

MANAGER wants situation; up-to-date trading; experienced Buyer; used to controlling staff; Major qualification. Write, "Chemist," 116 Spring Street, Bury, Lancashire.

MANAGER; qualified; good London experience; excellent references. Full particulars and terms, J. F., 10 Sharon Road, Chiswick, W.

MANAGER; 45; Locum or otherwise; experienced, London and provinces; disengaged; satisfactory references. "Qualified," 87 Trinity Road, Southall, W.

MANAGER or Assistant (L.P.S.I.); elderly, active, gentlemanly; "Pharmacist," 5 John's Road, Portsmouth.

MANAGER; unregistered; competent; experienced; 4 years present berth; married. "X.," 53 Cannock Road, Wolverhampton.

MANAGER; age 45; ineligible for Army; thoroughly experienced; at present managing first-class Drug Stores. "T." (164/4), Office of this Paper.

MIDDLE-AGED; qualified; active; accustomed to all classes of businesses, including N.H.I. Dispensing; salary according to hours and duties; disengaged January 17. 162/34, Office of this Paper.

M.P.S.; Manager of small, good-class Dispensing business, or Dispenser; London, West End, Harrogate experience. Wesley W. Harrison, 25 Mornington Crescent, Harrogate.

PART-TIME situation wanted, in or near Liverpool, by student attending Liverpool College. Apply, Lloyd Thomas, 8 Victoria Street, Mumps, Oldham.

PART-TIME; Saturday afternoons and evenings, one other evening, Sundays if desired; absolutely reliable; Brighton experience; student; rejected; S.E. district preferred. 159/34, Office of this Paper.

PART-TIME; experienced; one or two evenings weekly, also Saturday after 2.30; S.E. 162/28, Office of this Paper.

PERMANENT Management, London; or would entertain early or immediate purchase on arranged terms; highest references; unqualified. "A. E.," 163 High Road, Tottenham, N.

PHARMACEUTICAL Chemist, 30, married, 16 years' West-End and provincial experience, wishes change; Management; good-class Dispensing; not single-handed, and preferably with house; in or near London; reasonable hours and good salary essential. 161/31, Office of this Paper.

PHARMACIST, qualified (59), active, as Manager or Senior in good-class business; moderate hours; in or near London; good references; or with view to succession. 163/40, Office of this Paper.

QUALIFIED; 32; married; experienced; good testimonials. "Pharmacist," 19 Newcombe Street, Anfield, Liverpool.

QUALIFIED Manager, married, requires berth; smart, young, and capable; live on premises preferred. Please state salary 159/39, Office of this Paper.

QUALIFIED; 36; permanency or Locum; Manchester district preferred. "Manager," 144 Whitworth Road, Rochdale.

QUALIFIED; very competent; 25; position as Manager with future interest preferred. 31 Garfield Road, Lavender Hill, S.W.

QUALIFIED; 42; ineligible; succession entertained. "Statim," 10 Terrace Street, Lees Road, Oldham.

QUALIFIED Chemist.—Elderly gentleman seeks re-engagement. Address, 162/15, Office of this Paper.

QUALIFIED (25) desires situation (outdoors) in a good-class Dispensing business; West of England preferred. "Experience" (162/6), Office of this Paper.

QUALIFIED Chemist by Exam, elderly man, London and Country business experience, open to light engagement; Extractor. 161/39, Office of this Paper.

QUALIFIED, experienced Managership; with view to succession; good-class Store trade; London preferred. Apply, "Succession" (165/36), Office of this Paper.

QUALIFIED; 40; disengaged; Locum or permanency. "Pharmacist," 153 Westfield Road, West Ealing, W.

SATURDAYS; quick Counterman; finest experience; ineligible. "Cheriton," Beverstone Road, Brixton Hill, S.W.

UNQUALIFIED; 17 years' experience; energetic, reliable, single, abstainer; capable Dispenser; able to take charge; North preferred; indoors or outdoors. Replies to "Disengaged" (158/36), Office of this Paper.

UNQUALIFIED; 31; married; ineligible; 15 years' all-round experience. Granges, 80 Lea Road, Wolverhampton.

UNQUALIFIED, as Senior, 30, tall, married, high-class all-round experience, seeks change; five years present berth. Please state salary offered and hours of business. Apply, "Camphor" (163/29), Office of this Paper.

UNQUALIFIED; ineligible; London; Store experience, Photographic, etc. "G." (166/15), Office of this Paper.

WANTED, situation as Dispenser or Counterman; punctual, reliable, tactful, good Salesman; high-class experience. Curtis, 14 Dixoil Terrace, Harrogate.

WANTED, Dispensing experience by lady holding Hall qualification; W. or S.W. preferred; small salary. "L.," Gamble & Co., Chemists, Kensington, W.

42; Hospital or Part-time; disengaged; qualified. 159/31, Office of this Paper.

WHOLESALE.

ACTIVE Traveller, British, ineligible, live connection, and well known from Birmingham to South Coast inclusive, desires re-engagement; good references. "Pittsburgh," Wormholt Road, W.

ADVERTISER, tall, ineligible, married, active, reliable worker, 24 years' Retail experience, seeks position in Wholesale; excellent references. "Camphor" (166/19), Office of this Paper.

ANALYTICAL Chemist.—Junior requires position in Chemical Laboratory; age 20; good knowledge of General Analysis; excellent references. "F. A. M." (162/27), Office of this Paper.

LADY, with 18 years' experience of Chemists' Packed Goods and Capsule making, requires position of responsibility; good disciplinarian and accustomed to control. 159/30, Office of this Paper.

PERFUMERY, Drug-grinding, Synthetics.—Advertiser, experienced, seeks berth; capable Buyer, Stockkeeper; well up in Powder work; take charge of department if desired; good credentials. "Benzyl" (165/34), Office of this Paper.

PHARMACEUTICAL Chemist (lady), with Analytical experience, desires work in Pharmaceutical or Chemical Laboratory. 161/32, Office of this Paper.

SPECIALITY Traveller, connection, Chemist, England and Wales, wishes Side-line; pocket-size sample and advertised line preferred. Apply, "Speciality" (158/14), Office of this Paper.

TRAVELLER, large experience with Perfume, Soaps, Brushes, and all Toilet Sundries, disengaged; over military age. W. H. Maycock, 53 Manilla Road, Selly Park, Birmingham.

TRAVELLER, now disengaged, desires appointment; seven years' connection West of England; also worked Midlands and North; qualified Chemist; excellent experience; good Salesman. 162/37, Office of this Paper.

TRAVELLER; 45; town or provincial; experienced Drugs, Sundries, or Proprietaries; shortly disengaged. 166/16, Office of this Paper.

YOUNG Chemist (26), ineligible for the Army, 10 years' first-class experience in Chemicals, Galenicals, and general Laboratory work, capable supervisor, seeks an engagement. 159/28, Office of this Paper.

MISCELLANEOUS.

MCADAM & TUCKNISS, Sharedealers, Bank Chambers, Blackheath, S.E. Established 1898. Telephone, 81 Lee Green.

Shares for Sale (free of commission, subject).—500 Allen & Hanbury "A" Preference, 21*s.* 3*d.*; 50 Claudius Ash Ordinary, 19*s.* 3*d.*; 300 Wright, Layman & Umney 6 per cent. Preference, 20*s.* 6*d.*; 50 Spratts' Ordinary, 30*s.* 9*d.*; 80 W. Gossage Preference, 18*s.* 9*d.*

Wanted (subject).—Canwal and Idris Debentures, Evans Lescher Preference.

Every effort made to effect business for Buyers and Sellers in all Stocks and Shares. Bankers, London County and Westminster.

SECOND-HAND Chemists' Fittings.—We have an exceptionally fine selection of these in all sizes; prices are right, and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, RUDDUCK & CO., 262 Old Street, London, E.C.

SHOPFITTINGS (SECOND-HAND).—12-ft. Mahogany and Plate-glass Serving Counter, £9 10*s.*; Mahogany and Plate-glass Perfumery Showcase and Desk, Mirror back and Plate-glass shelves, 58*s.*; 8-ft. Mahogany and Bent Plate-glass Counter-case, with Display and Serving Shelves, £6 17*s.* 6*d.*; 10-ft. handsome Piano Wall Showcase, great bargain, £21; quantities of other cheap lines. PHILIP JOSEPHS & SONS, LTD., 93 Old Street, London, E.C.

BEST cash price paid for all old Cameras, any make, also all old Photo goods, no matter how damaged; any kind you may have send them along; cash will be sent same day; no waiting; we buy all and return nothing. S. E. Hackett, 23 July Road, Liverpool, E.

CHEMISTS' Fittings.—Silent Salesman, Glass Showcases of every description, Drugfittings, Dispensing-screens, Wall-cases, Glass-front Counters, Perfume-cases, Desks, Counter Drawers, Shelves, Mirrors, shop-soiled, second-hand, at lowest prices; don't decide till you get my estimate; you can't get better value; 30 years fitting Pharmacies. GEORGE COOK, The Chemists' Working Shopfitter, Catherine Street, City Road, London, E.C.

CHEMIST'S good second-hand 12-ft. Mahogany Drug Fitting, 6-ft. Mahogany Dispensing Screen and Counter, 4-ft. Mahogany Wall-case; 10-ft. Glass-fronted Counter; Nest of Counter Drawers; Perfumery Case and Desk; 4-ft. Bent Glass Counter Case; the lot £45; bargain; cheapest house for Window Enclosures, Mirrors, Glass Shelves, modern Shop Fronts, Improvements, etc.; plans prepared; estimates free. Mills, Shopfront, Shopfitting, and Glass Facia Works, 163-165 Old Street, London, E.C. 'Phone London Wall 550.

McQUEEN'S A.B.C. System of Accounts; works out profit and loss account, balance sheet, etc., with guaranteed certainty; gives exactly what Surveyors of Taxes want, and is a remedy for over-assessment; practically automatic Bookkeeping; 12th edition. Particulars and testimonials free. McQueen & Co., Moat Road East, Leicester.

DECISIVE ACTION is essential if you wish to economise in your expenditure in Showcards.

SEND NOW and secure our **SPECIAL CLEARANCE LINES**

3, 12×9, Neatly Designed Cards for 2/8
12 Cards, 5½×3½ and 6×4, Various Tints, for 2/6
12 „ Shelf Slips, 12×1½ & 12×2 „ „ „ 3/4
Carr. Paid. Two prices limit each Card.

Special Adv. Line 2, 15×10, Designed Cards for 2/8 „ „ „

F. MERTEN & CO., 72 Marlborough Rd., HOLLOWAY, LONDON, N.

WAR WANTS EXCHANGE.

The object of this section is to facilitate the interchange of pharmaceutical products which are scarce at present owing to the War, and which the inquirers have failed to obtain through the customary business channels.

TERMS

Minimum charge (including registration fee) of **1/-** for six words or less; **2d.** per word beyond, prepaid. Inquiries are inserted with a registration number attached to each item, and replies will be communicated direct to the inquirers by the Information Department of "THE CHEMIST AND DRUGGIST."

WANTED.

Principals having any of the following articles to dispose of are requested to notify the fact by postcard or otherwise stating quantity and price to

THE WAR WANTS EXCHANGE,

"The Chemist and Druggist," 42 Cannon Street, London, E.C.

Hydroquinone (88/69)
Metol (Hauff.) (88/69)
Pertussin, original bottles (163/11)
Pot. permang. (88/69)
Trivalin tablets (161/27)

FOR DISPOSAL.

Bona-fide buyers of the following articles are requested to communicate their exact requirements promptly to us, and we shall place them in touch with sellers:—

Acid. aceto-salicyl., 1 lb. (165/39)
Atropine sulphate, 1½ oz.; offers wanted (164/1)
Chloralamid, 1 oz. (87/48)
Cocain. hydrochlor., B.W., 8 oz. (165/39)
Novocain ampoules, 4 doz. (165/39)
Quinine sulph., 32 oz., 50 oz., 8 oz. (88/69)
Suprarenin sol., 5% (165/39)
Tannin tablets 1×500 bottle, 2½ gr. (88/69)

EXCHANGE COLUMN

One halfpenny per word with name and address. One penny per word if we register the address and attach a number.
No advertisement inserted for less than 6d.

FOR DISPOSAL.

BOOKS AND PERIODICALS.

SQUIRE'S "Pocket Companion," 1915, new, 9s. carriage paid. 160/5, Office of this Paper.

DRUGS AND CHEMICALS.

MAGENTA, pure, 6 lb., 12s. lb. 152/13, Office of this Paper.

6 lb. pearl ashes, 10 oz. calcii lactas, 1 lb. methyl salicylas, 2½ lb. potass. prussias flav. Offers, Thornton, Blaenavon, Mon.

OPTICAL AND PHOTOGRAPHIC.

TWO new Radio Junior radiopticians, 12s. 6d. and 25s. sizes, with acetylene generators, complete; what offers? Stonelake, Chemist, Guernsey.

MISCELLANEOUS.

STICKY fly-paper machine. Humble, 286 High Street, Brentford.

POCKET canteens; overstock; any price to clear. Evans, Margate.

ABOUT 20 tin-lined cod-liver oil barrels, 1s. 6d. each; our warehouse. H. E. Stevenson & Co., 122 Great Suffolk Street, S.E.

WHAT offers? gas plaster spatula, Oertlin's beam only, biunial lanterns. Hasselby, Hastings.

2 GROSS 6-lb. tins tooth-powder; 8 doz. 1-oz. Cannon essence perfume bottles; 4 gross 3-oz. wide-mouth bottles, with sprinkler tops for dental powder, etc.; about 150 1s. and 150 2s. hair-dye; also ½-oz. and 1-oz. green-tinted bottles and cardboard cases for hair-dye; 2 gross 4½d. shaving-tablets; samples sent. Maurice Smith, Kidderminster.

WANTED.

KODAK developing tanks for Brownie and 3½-in. films. Stonelake, Chemist, Guernsey.

SACCHARIN, 1 lb. or less. State strength and price, "V.," 119 Okehampton Road, Exeter.

WANTED, henigallol (Knoll), any quantity. T. H. Bateman & Co., 223 Finchley Road, London, N.W.

WANTED, Javol hair-wash (oily), any size or quantity. Stickland, 23 Cromwell Place, South Kensington.

WANTED, optical test lenses, facial measurement set, and other accessories. Tamplin, Kingston-on-Thames.

TIN boxes, decorated or plain, for ointments, tooth-powders, etc., wanted; any quantities for cash. Levers, Chemists, 56-58 Chapel Street, Manchester.

OPTICAL books; Minor, Major, Chemists' books; send prepaid for valuation; cash offers per return. Gower, Bookseller, 41 Voltaire Road, Clapham, S.W.

MORRHUOL; a few pounds wanted. Sellers please communicate with Dakin Brothers, Ltd., 82 Middlesex Street, Bishopsgate, London, E.

Coming Events.

This section of the "C. & D." is reserved for advance notices of meetings or other events. These should be sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Friday, January 7.

London Chamber of Commerce (Oil Trade Section), Oxford Court, London, E.C., at 2.30. The agenda includes a consideration of what recommendation shall be made by the Section to the Special Committee appointed by the Council of the Chamber to study the question of the future of British trade.

Sunday, January 9.

Pharmacist Volunteer Training Corps, Millbank School, Erasmus Road, Westminster, S.W., at 10 A.M. Drill and practical first-aid.

Tuesday, January 11.

Oldham Pharmaceutical Association, Café Monico, Union Street, at 3 P.M. Mr. F. Newby, "Selections of Lancashire Dialect Poetry."

Wednesday, January 12.

Royal Society of Arts, John Street, Adelphi, London, W.C., at 3 P.M., Mr. Jas. Swinburne, F.R.S., on "The Science of Some Toys" (Juvenile Lecture).

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, London, W.C., at 11 A.M., Council Meeting.

Western Pharmacists' Association, Restaurant Frascati, Oxford Street, London, W., at 7 P.M. Whist-drive in aid of the Benevolent Fund of the Pharmaceutical Society. Tickets (4s. 6d. each, including supper) may be had from the Social Secretary, Mr. Charles Brooks, 4 Northumberland Avenue, E.C.

Manchester Pharmaceutical Association, Chess Club Room, 65 Market Street, at 3.15 P.M. Mr. J. Grier, M.Sc., lantern lecture on "Nature's Plant Laboratory."

Newcastle-upon-Tyne Pharmacists' Association, Church Institute, Hood Street, at 6.30 P.M. Addresses by representatives of the Proprietary Articles Trade Association.

Pharmacist Volunteer Training Corps, 17 Bloomsbury Square, London, W.C., at 3 P.M. Lecture on Sanitation and instruction in first-aid. This programme will be repeated on Thursday.

Thursday, January 13.

Chemical Society, Burlington House, Piccadilly, London, W., at 8 P.M. Informal Meeting.

North London Pharmacists' Association. Fireside social.

South-East London Pharmacists' Association, Maitland House, 134 Greenwich Road, Greenwich, at 3 P.M. General Meeting.

Saturday, January 15.

Pharmacist Volunteer Training Corps, Duke of York's, Westminster, at 2.30 P.M. Lecture.

Printed for the Proprietors by SPOTTISWOODE & CO., LTD., New-street Square, and Published by the Proprietors at 42 Cannon Street, in the City of London.—*January* 8, 1916. [62]

BRUNNER, MOND & CO.'S

Alkali Products.

Crescent Brand.

These products are made by the Ammonia Process, and are distinguished from others by their great purity.

Bicarbonate of Soda.

This Bicarbonate answers all the requirements of the British Pharmacopœia. It is a pure, refined, and recrystallised salt, particularly free from metals or any base other than soda. This sodium bicarbonate is specially suitable for the preparation of granular effervescent preparations and salines, seidlitz powders and baking powders, and is well adapted for other medicinal and domestic purposes. It is the purest and cheapest sodium bicarbonate made.

Concentrated Crystal Soda.

This sodium compound (sodium sesquicarbonate) is a variety of carbonate of soda in small silky crystals, containing much less water than ordinary washing soda; 1 lb. of it does the work of 2 lbs. of washing soda. Concentrated crystal soda is excellently suited for chemists' trade; they can make a speciality of it, and it is also suited for making water-softeners brush powders, hair-wash powders, and the like.

Pure Alkali.
58 Degrees.

A dry, white powder: dissolves quickly and easily in water, making an excellent detergent for use by printers, bleachers, dyers, and for bottle washing. Is nearly equal to 99 per cent. carbonate of soda; is much used by glass, paper, and soap makers. The best alkali for soap powders and washing powders.

Pure Soda Crystals

Caustic Soda.

Manufactured from pure Carbonate of Soda, and supplied of all degrees of strength.

Bleaching Powder.

Carbonate of Ammonia

(Lump and Powder).

Retailers can obtain these products through any Wholesale house by specifying Brunner, Mond & Co.'s "Crescent" Brand. The Manufacturers supply wholesale quantities only, and will quote on application to

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THE BRITISH DRUG HOUSES LTD

URO-HEXOIDS

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TABLETS OF UROHEXENE, A COMBINATION OF HEXAMINE AND LITHIUM BENZOATE. A SUCCESSFUL URINARY ANTISEPTIC, DIURETIC AND ANTI-LITHIC.

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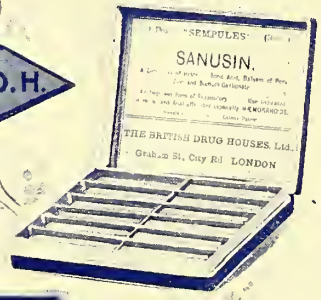

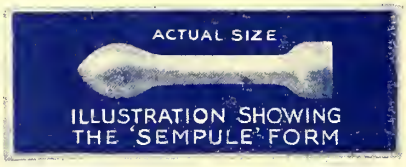

THE ABOVE LINES EFFECTUALLY REPLACE GERMAN PRODUCTS SAMPLES OR LITERATURE (FOR DISTRIBUTION TO MEDICAL MEN AND OTHERS) MAY BE HAD ON REQUEST.

22-30, Graham Street, City Road LONDON, N.

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